SAMSUNG

8mm CAMCORDER

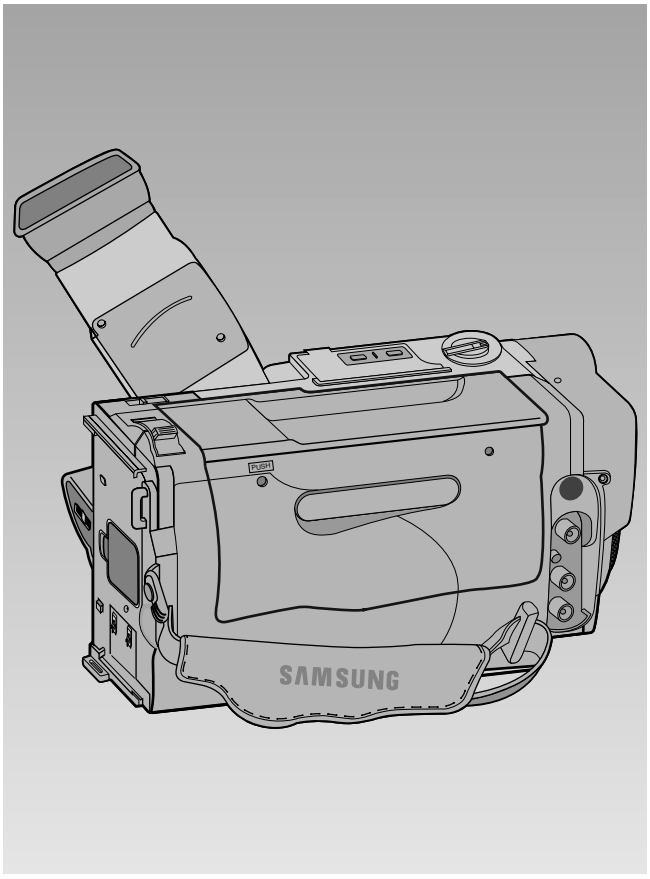
VP-A12/VP-A15
VP-A17/VP-A18

8

SERVICE Manual

For mechanical disassembly and adjustment, refer to the "Mechanical Manual" (DE-6 ⟶ AD68-30200A).

8mm CAMCORDER



CONTENTS

1. Precautions
2. Reference Information
3. Product Specifications and Comparison Chart
4. Disassembly and Reassembly
5. Alignment and Adjustment
6. Exploded View and Parts List
7. Electrical Parts List
8. Block Diagrams
9. PCB Diagrams
10. Wiring Diagram
11. Schematic Diagrams

© Samsung Electronics Co., Ltd. APR. 1997

AD68-20274A

1. Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.

2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including : control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people--particularly children --might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

   If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (See Fig. 1) :
   Warning : Do not use an isolation transformer during this test. Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, *Leakage Current for Appliances*), and Underwriters Laboratories (*UL Publication UL1410, 59.7*).

5. With the unit completely reassembled, plug the AC line cord directly the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including : antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

6. X-ray Limits :
   The picture tube is designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original.

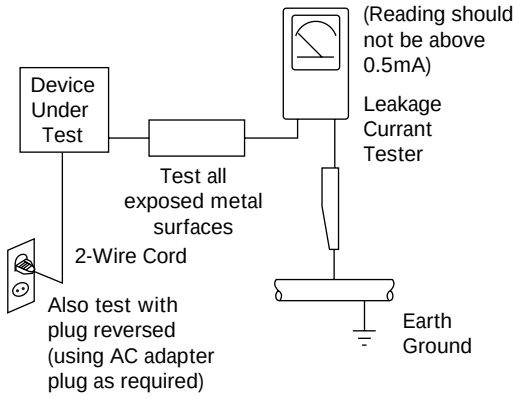

(Reading should not be above 0.5mA)
Device Under Test
Leakage Currant Tester
Test all exposed metal surfaces
2-Wire Cord
Also test with plug reversed (using AC adapter plug as required)
Earth Ground

Fig. 1 AC Leakage Test

7. Antenna Cold Check :
   With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong.
   Connect the other lead to the coaxial connector.

8. High Voltage Limit :
   High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits.

   Heed the high voltage limits. These include the *X-ray protection Specifications Label*, and the *Product Safety and X-ray Warning Note* on the service data schematic.

9. Some semiconductor ("solid state") devices are easily damaged by static electricity.
   Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.

10. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging Wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)

11. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.

12. Design Alteration Warning :
    Never alter or add to the mechanical or electrical design of this unit. Example : Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

13. Hot Chassis Warning :
    Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.

    To confirm that the AC power plug is inserted correctly, do the following : Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.

14. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, *regardless of the AC plug polarity*. These units can be safely serviced *only* if an isolation transformer inserted between the receiver and the power source.

15. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.

16. Always connect a test instrument's ground lead to the instrument chassis ground *before* connecting the positive lead; always remove the instrument's ground lead last.

17. Observe the original lead dress, especially near the following areas : Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.

18. Picture Tube Implosion Warning :
    The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.

19. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.

20. Product Safety Notice :
    Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original--even if the replacement is rated for higher voltage, wattage, etc.

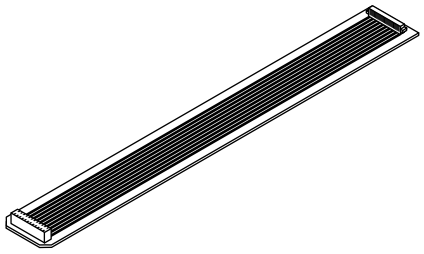
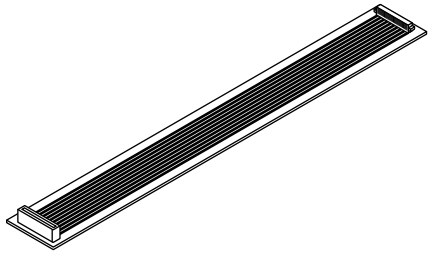
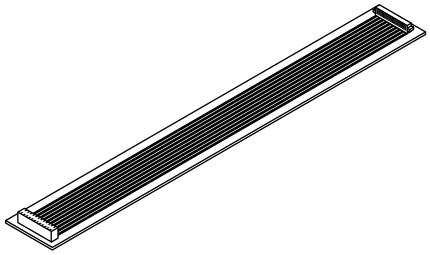
    Components that are critical for safety are indicated in the circuit diagram by shading, (or).
    Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

2. Reference Information

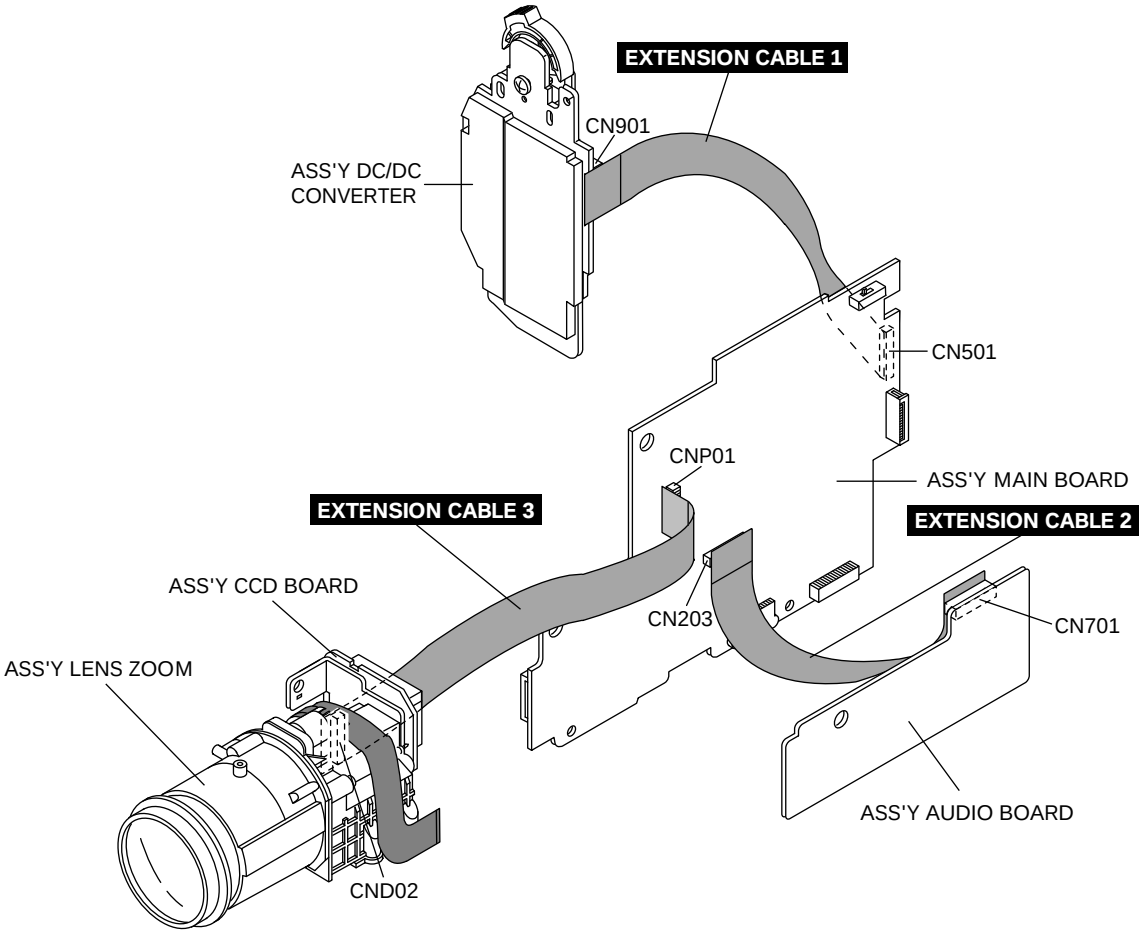
2-1 Servicing Jigs and Special Tools

2-1-1 Servicing Jigs

Part No.	Jig Item	Specification	Description				Remarks
			Main board	CCD board	DC/DC Converter board	Audio board	
68140-500-037	Extension Cable 1	Pin 36	CN501		CN901		Troubleshooting
68140-500-035	Extension Cable 2	Pin 40	CN203			CN701	Troubleshooting
68140-500-038	Extension Cable 3	Pin 40	CNP01	CND02			Troubleshooting

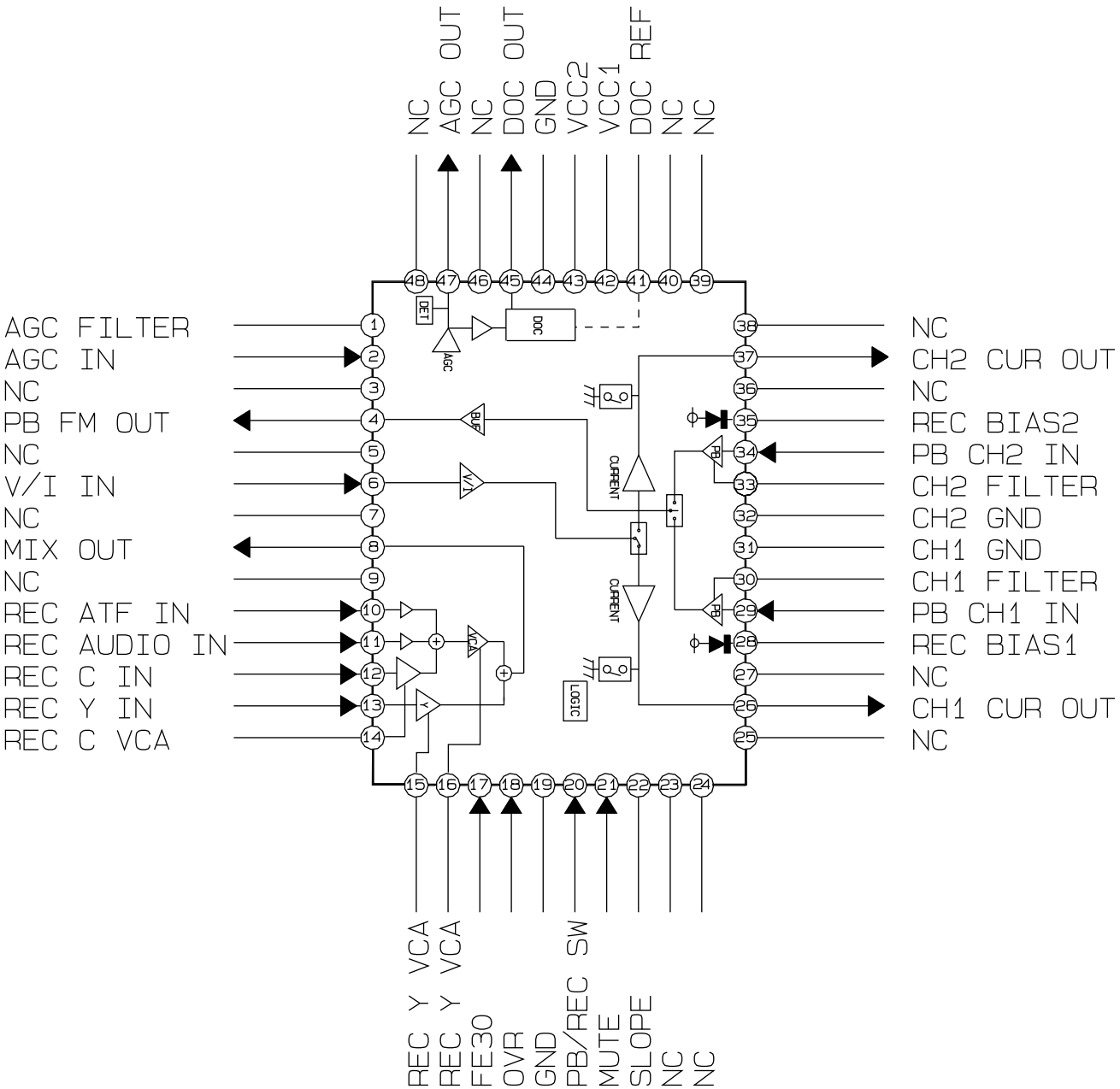
68140-500-033	**68140-500-035**	**68140-500-038**
Extension Cable 1	Extension Cable 2	Extension Cable 3
		

2-4-2 Extension Cable Connections

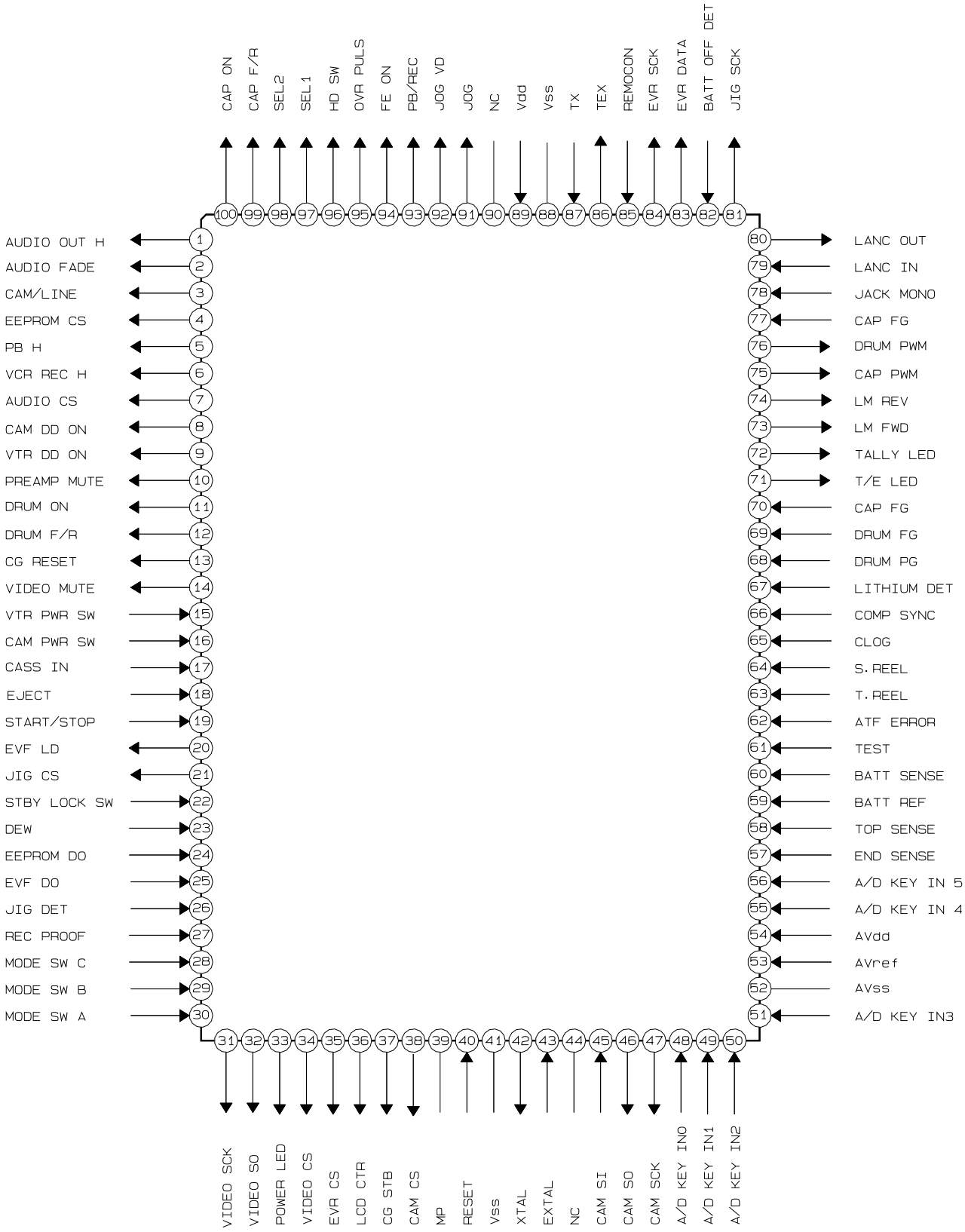


2-2 IC Blocks

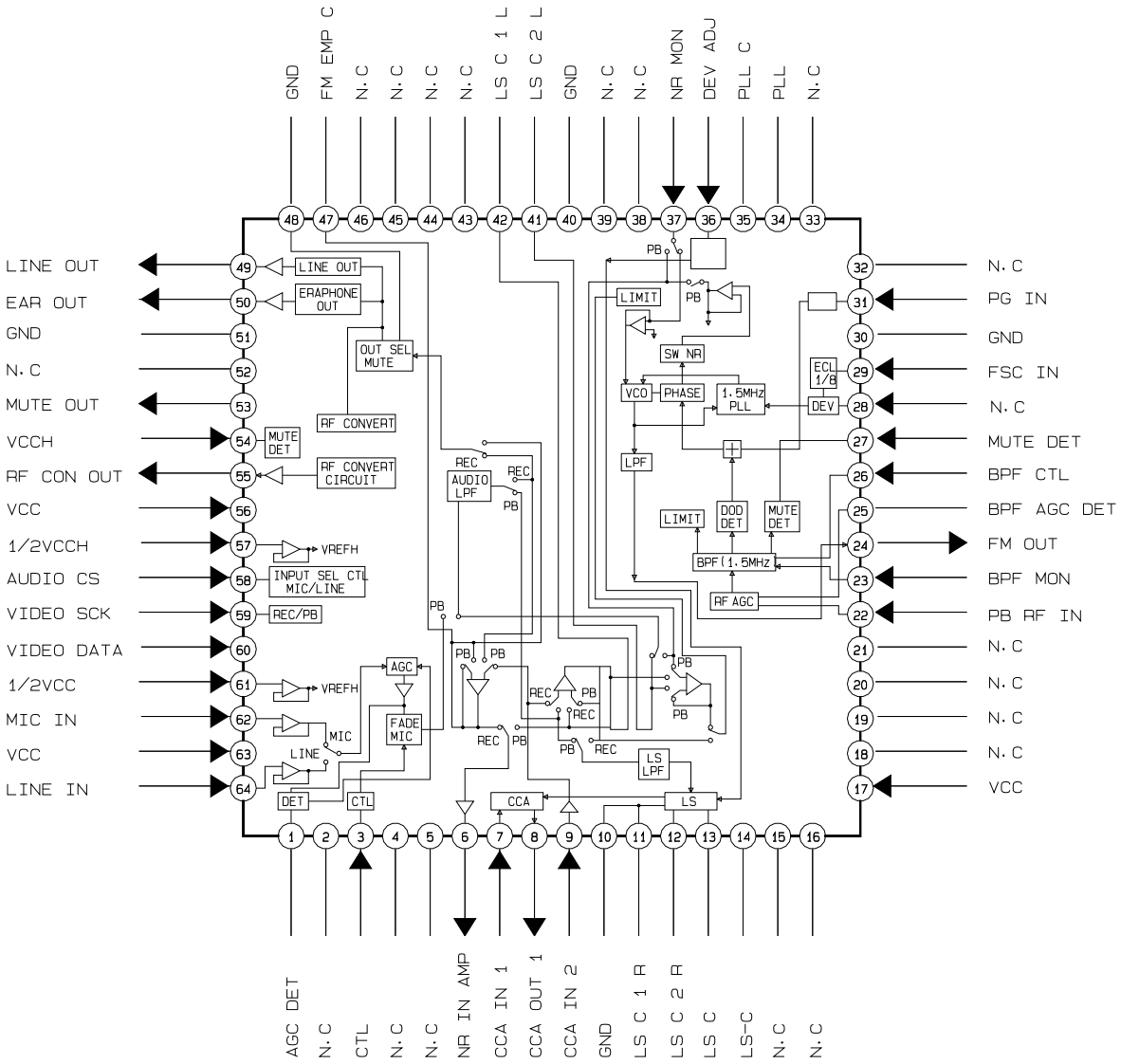
2-2-1 IC101(M52369FP)



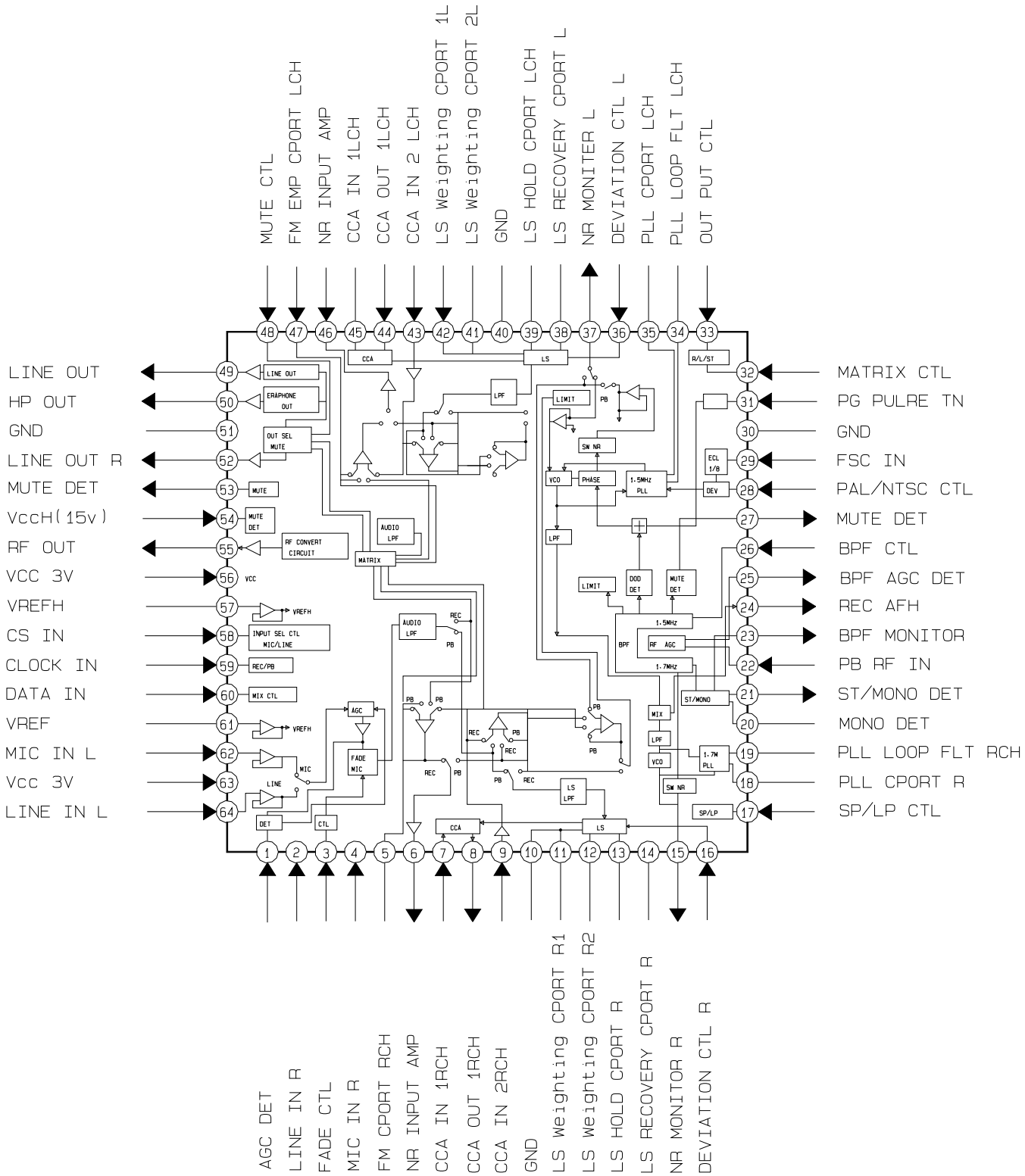
2-2-2 IC601(CXP87240A)



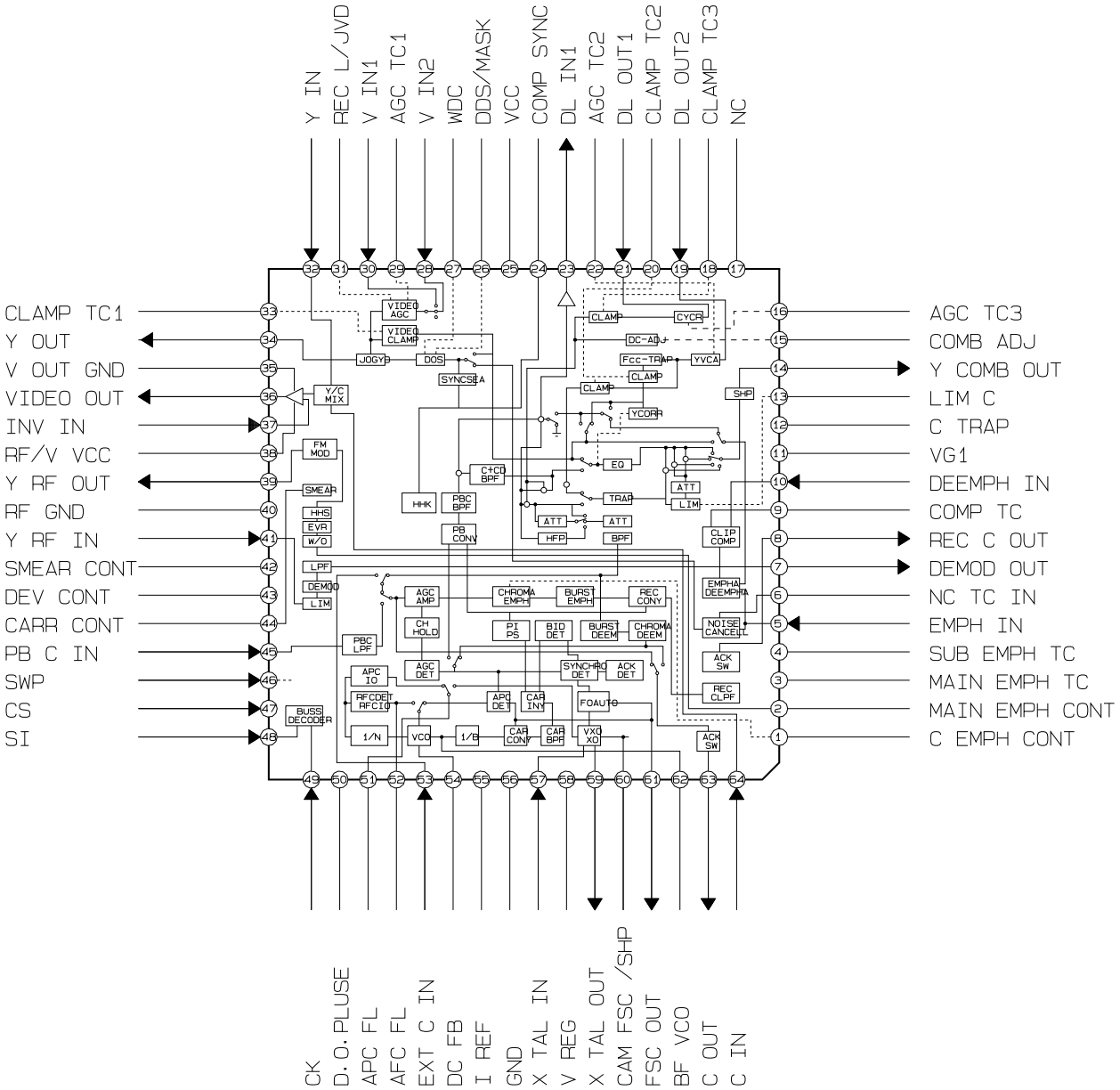
2-2-3 IC701(AN3996NFHP-Mono)



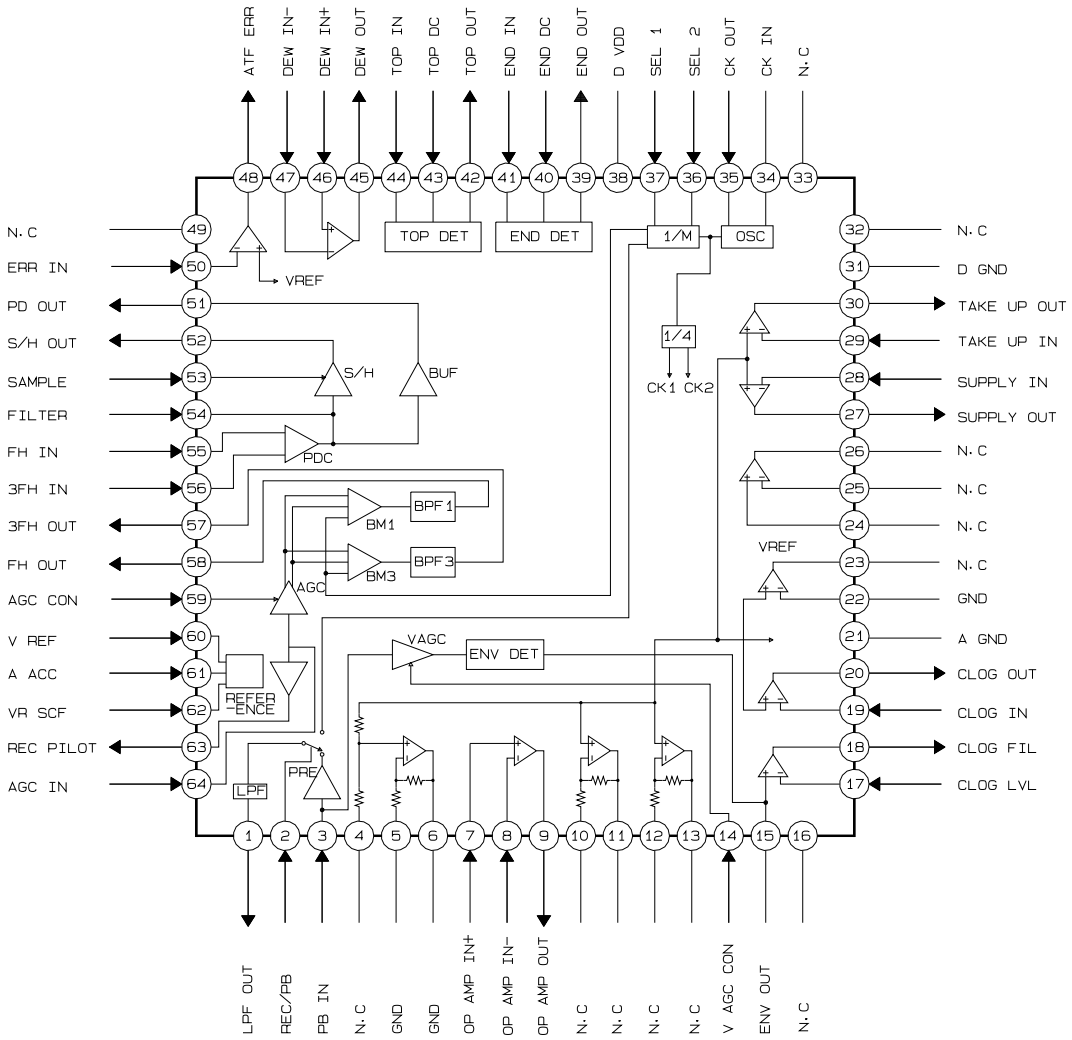
2-2-4 IC701(AN2980A-Stereo)



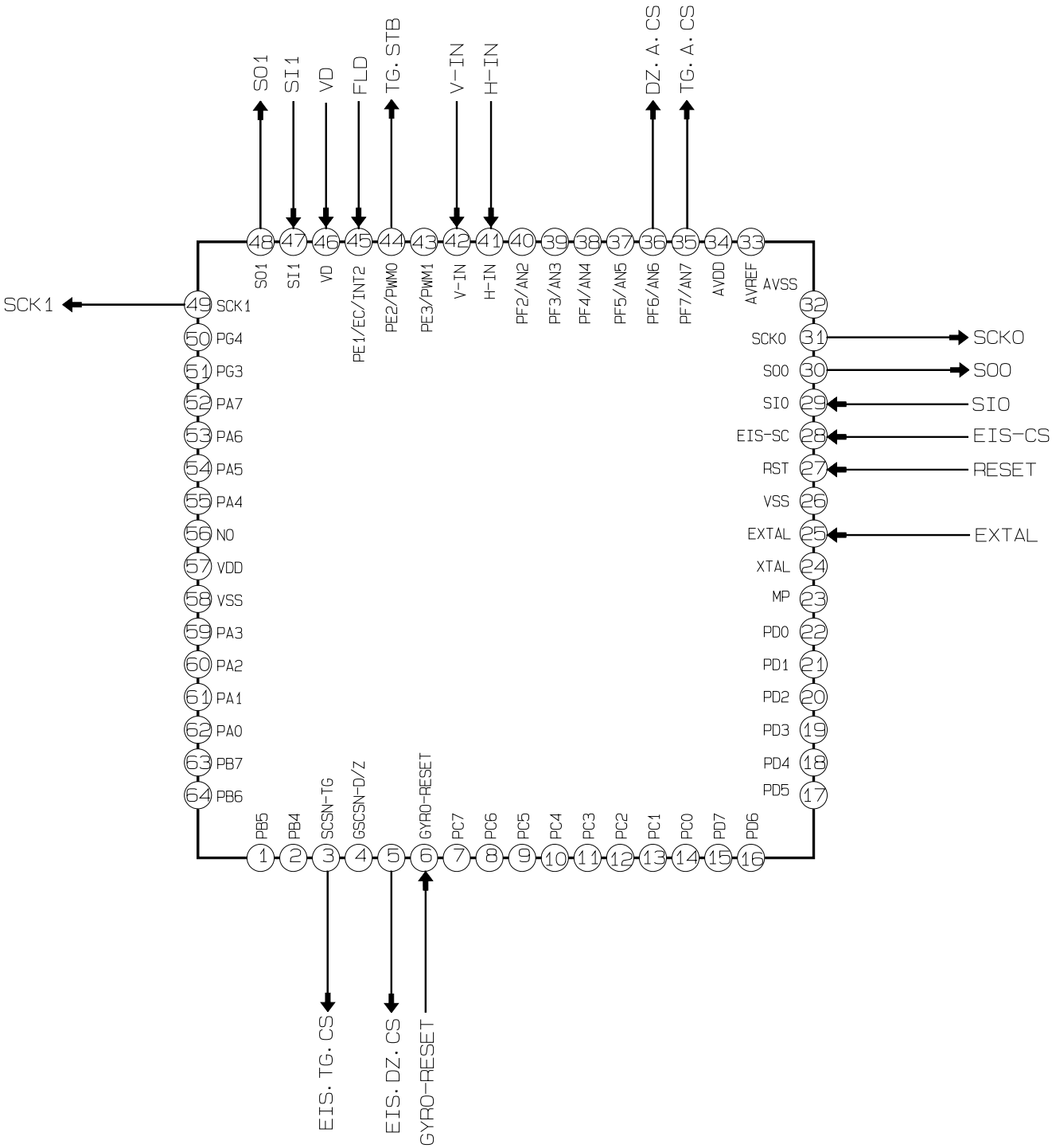
2-2-5 IC201(CXA1700R)



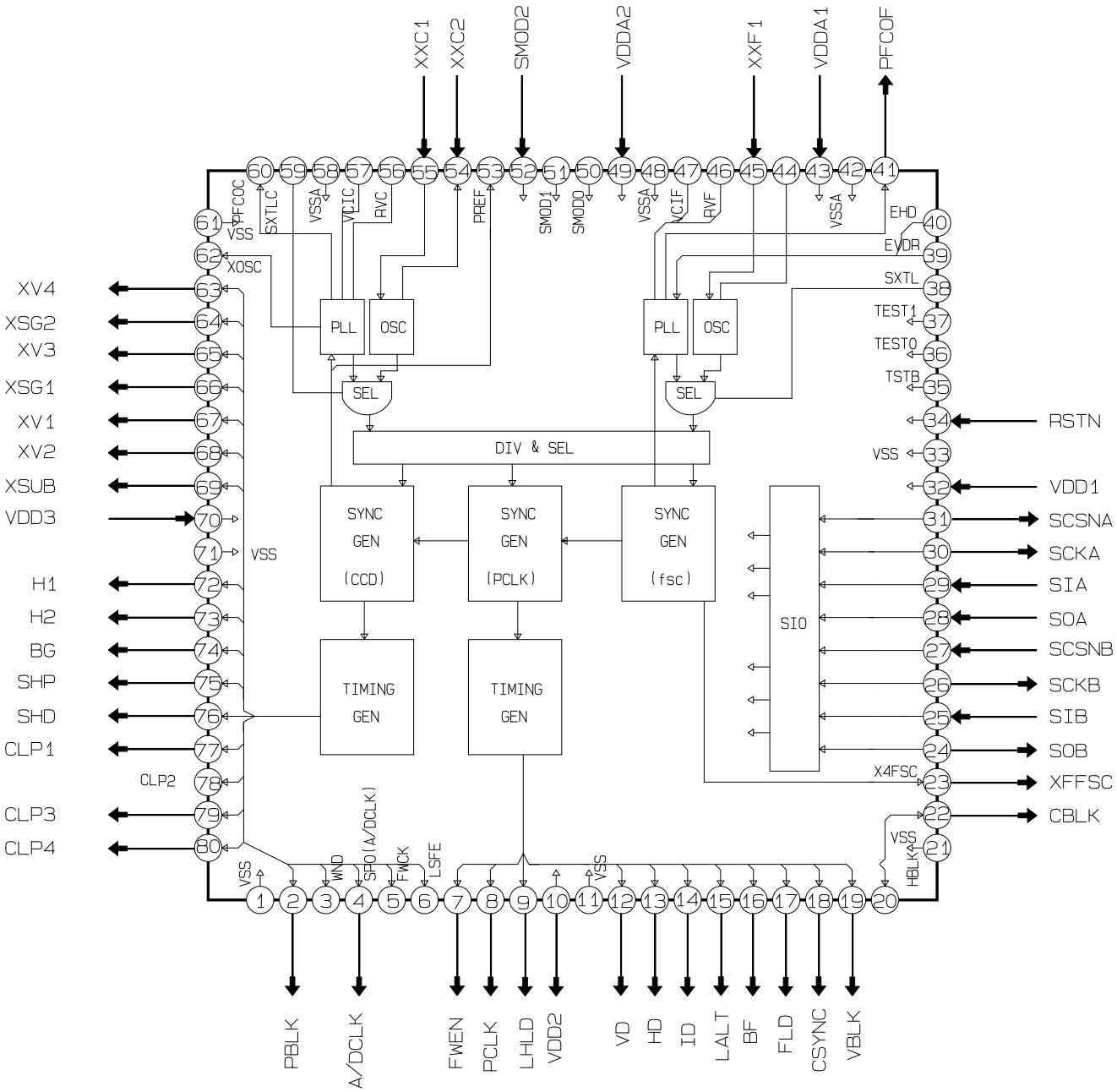
2-2-6 IC501(KA8322)



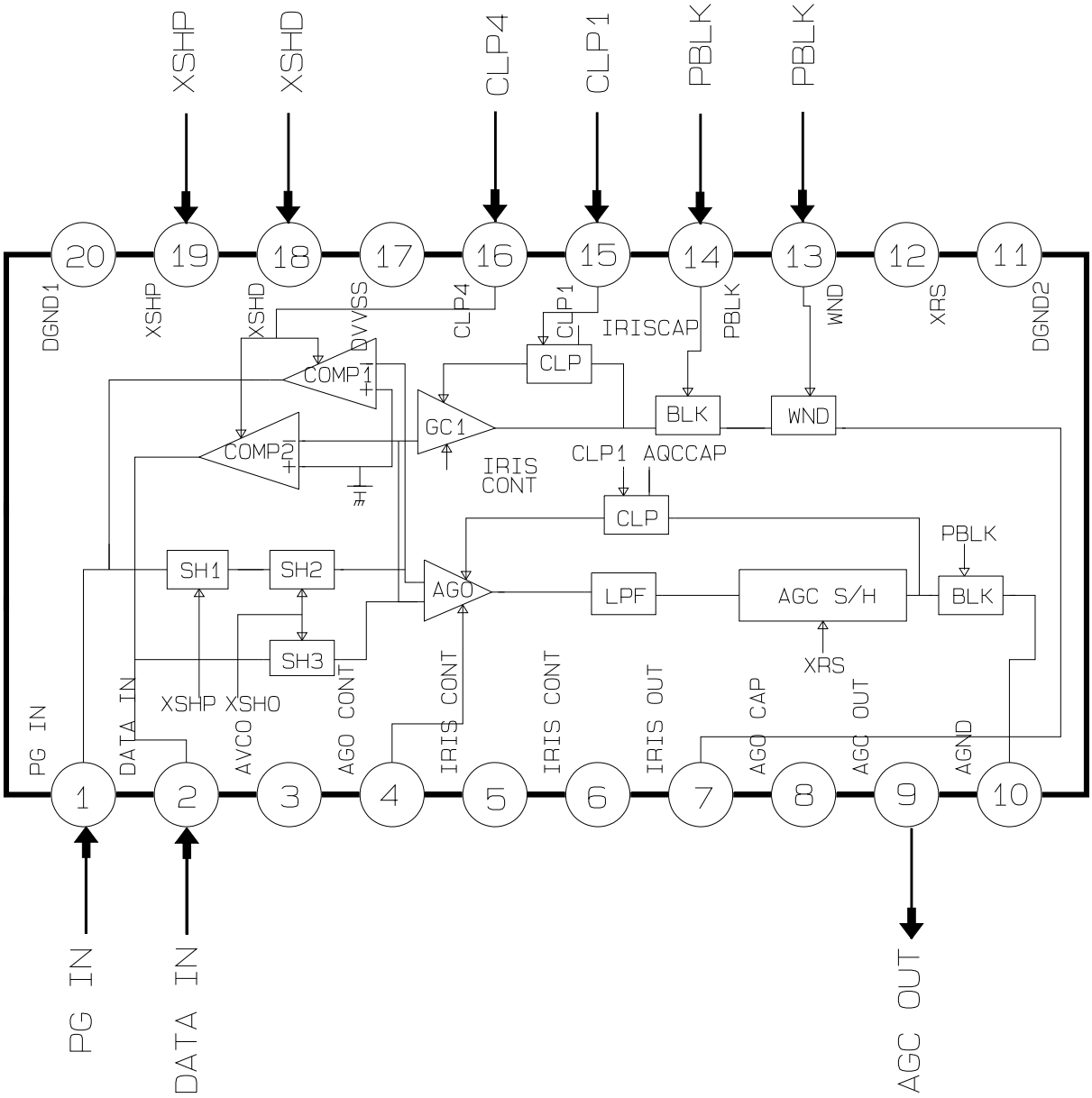
2-2-7 ICS15(CXP811P24R)



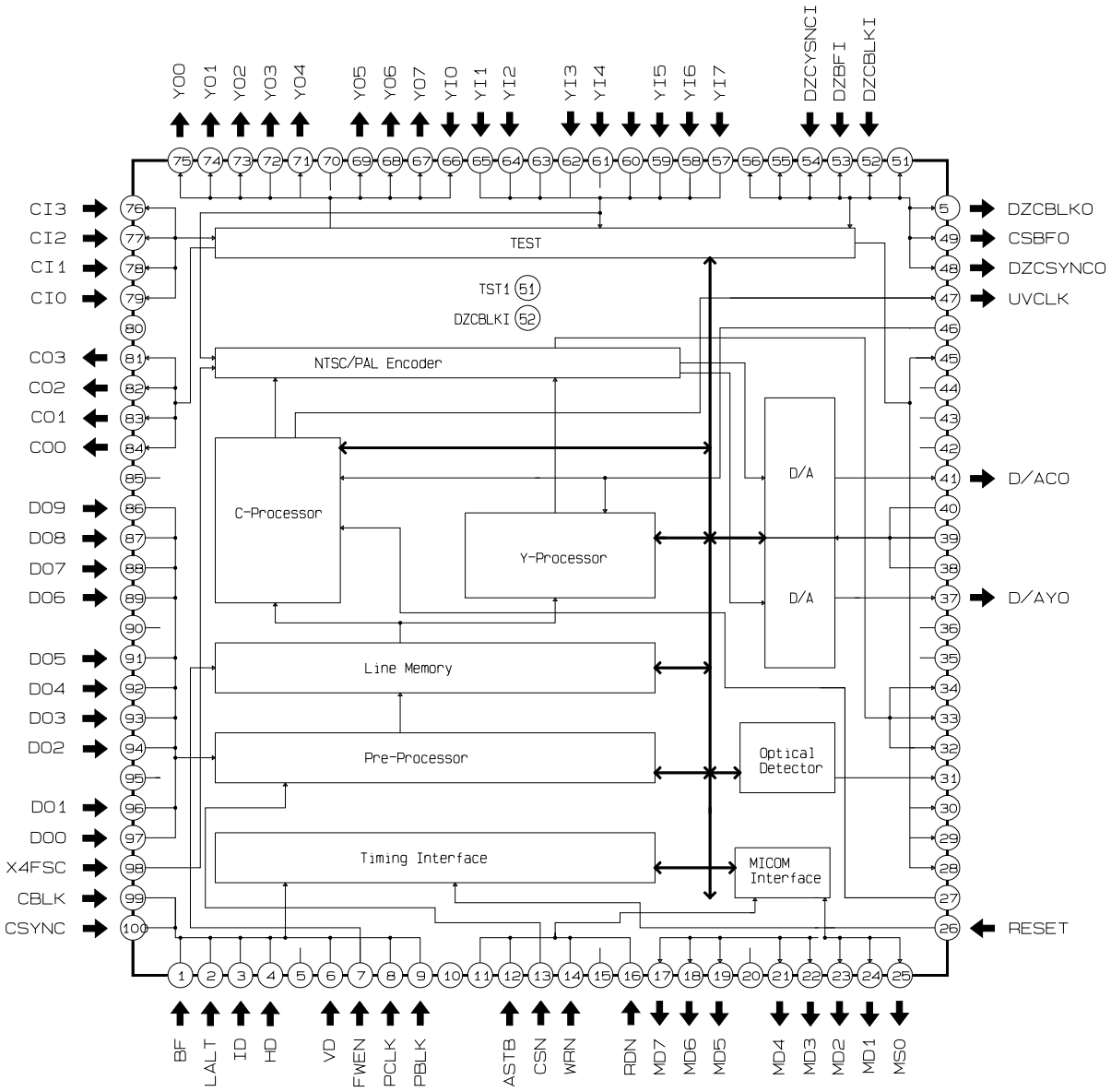
2-2-8 ICP01(KS7213)



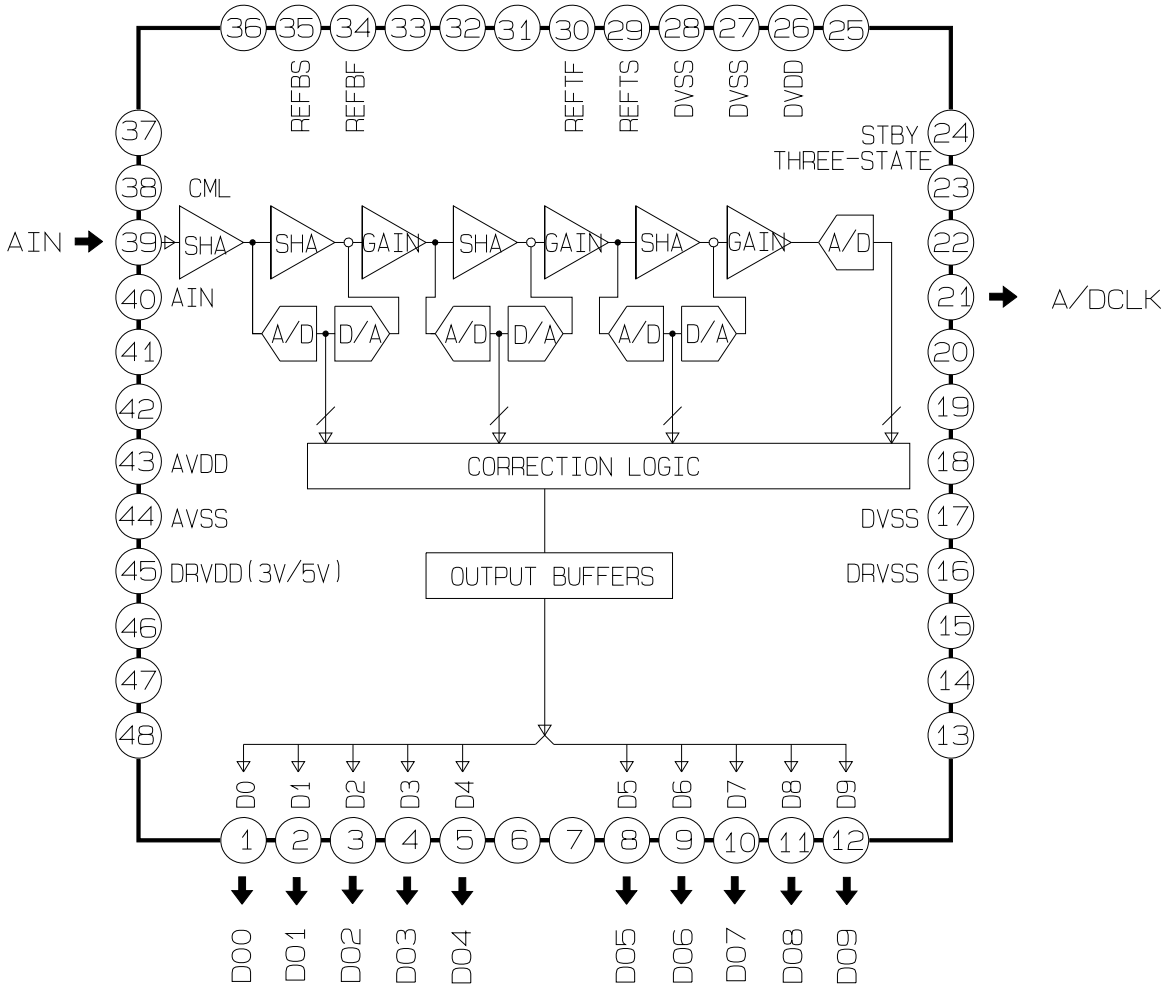
2-2-9 ICP02(KA7307)



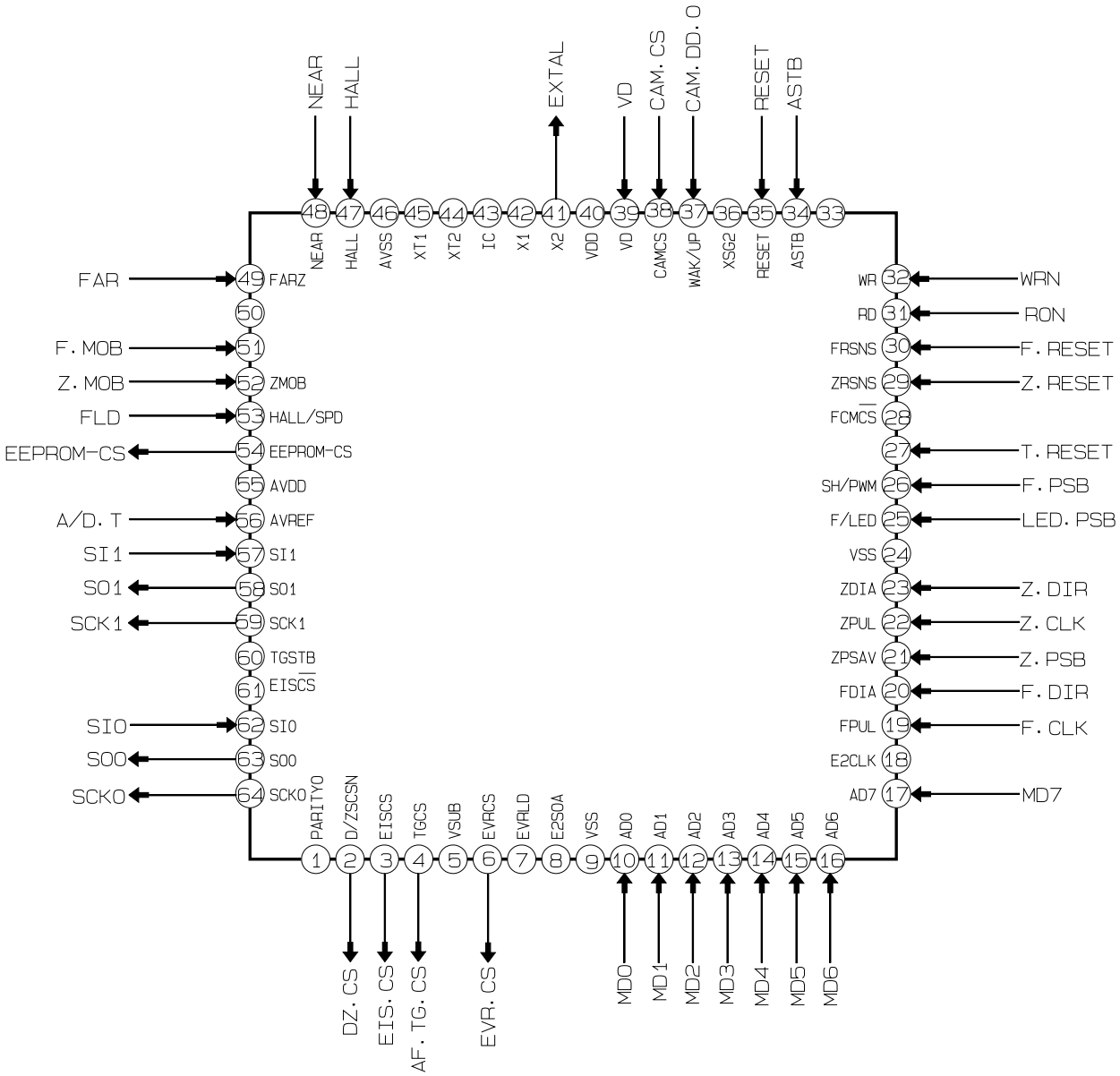
2-2-10 ICP08(KS7306)



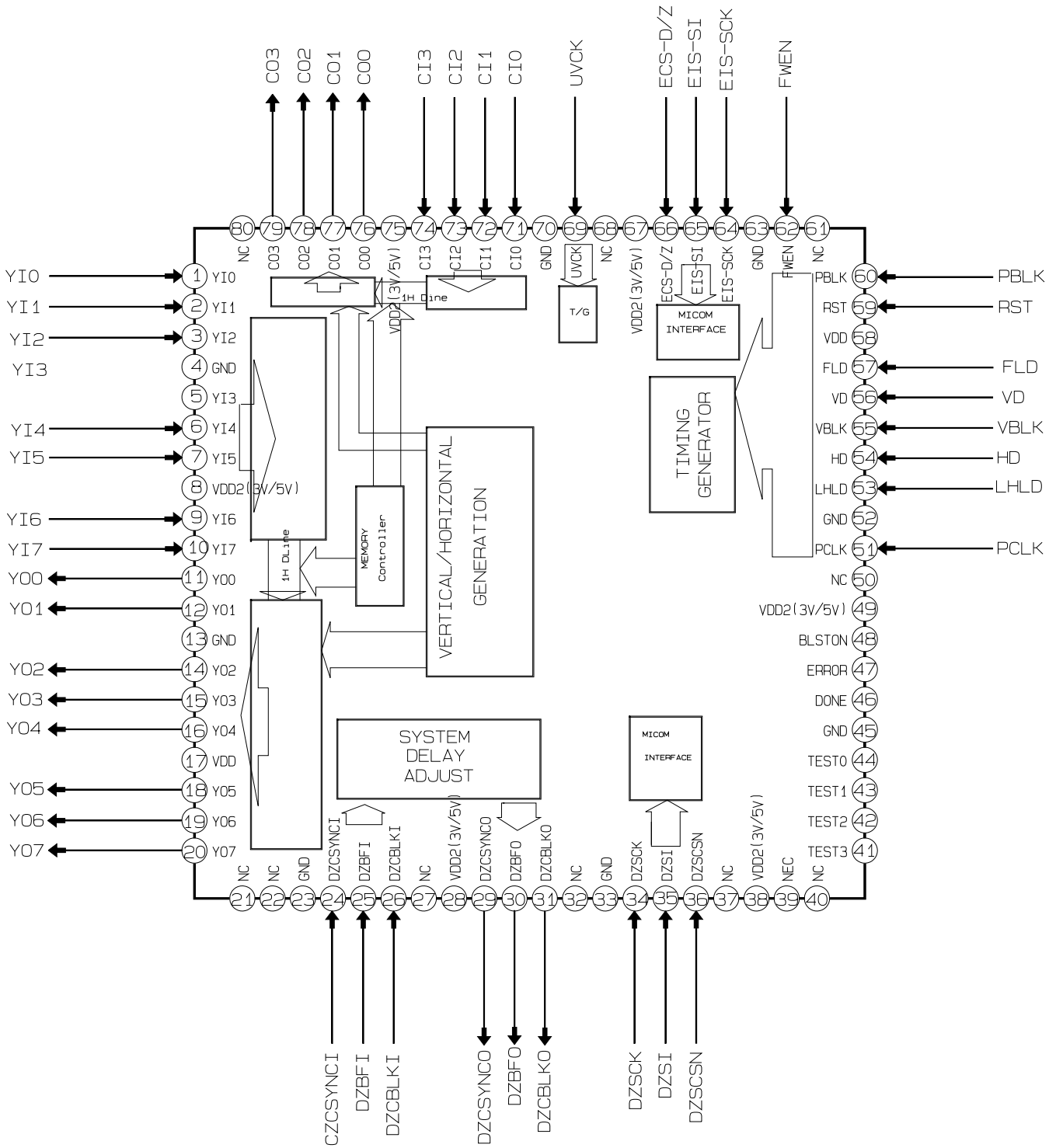
2-2-11 ICP06(AD876)



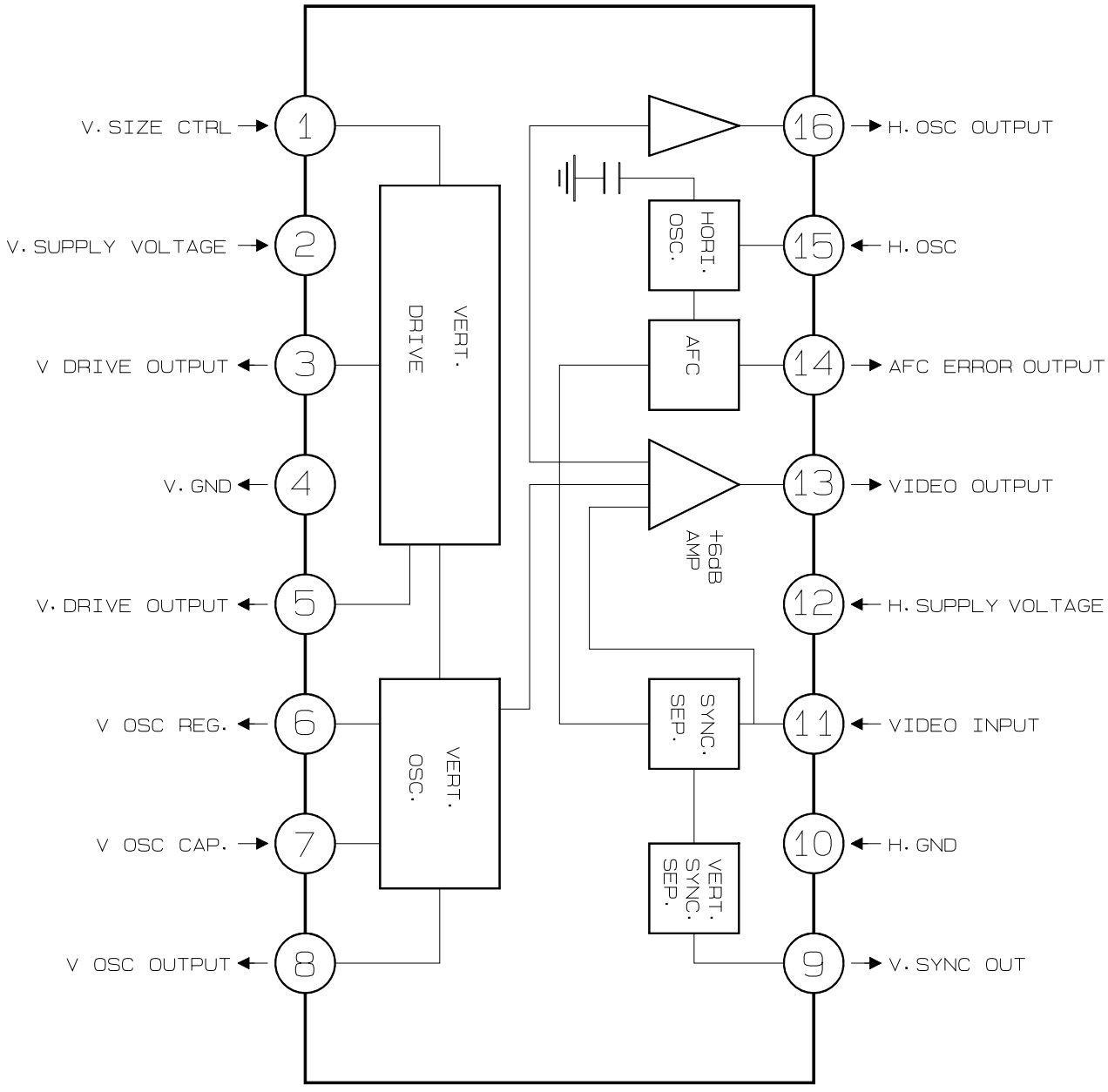
2-2-12 ICP09(UPD78018)



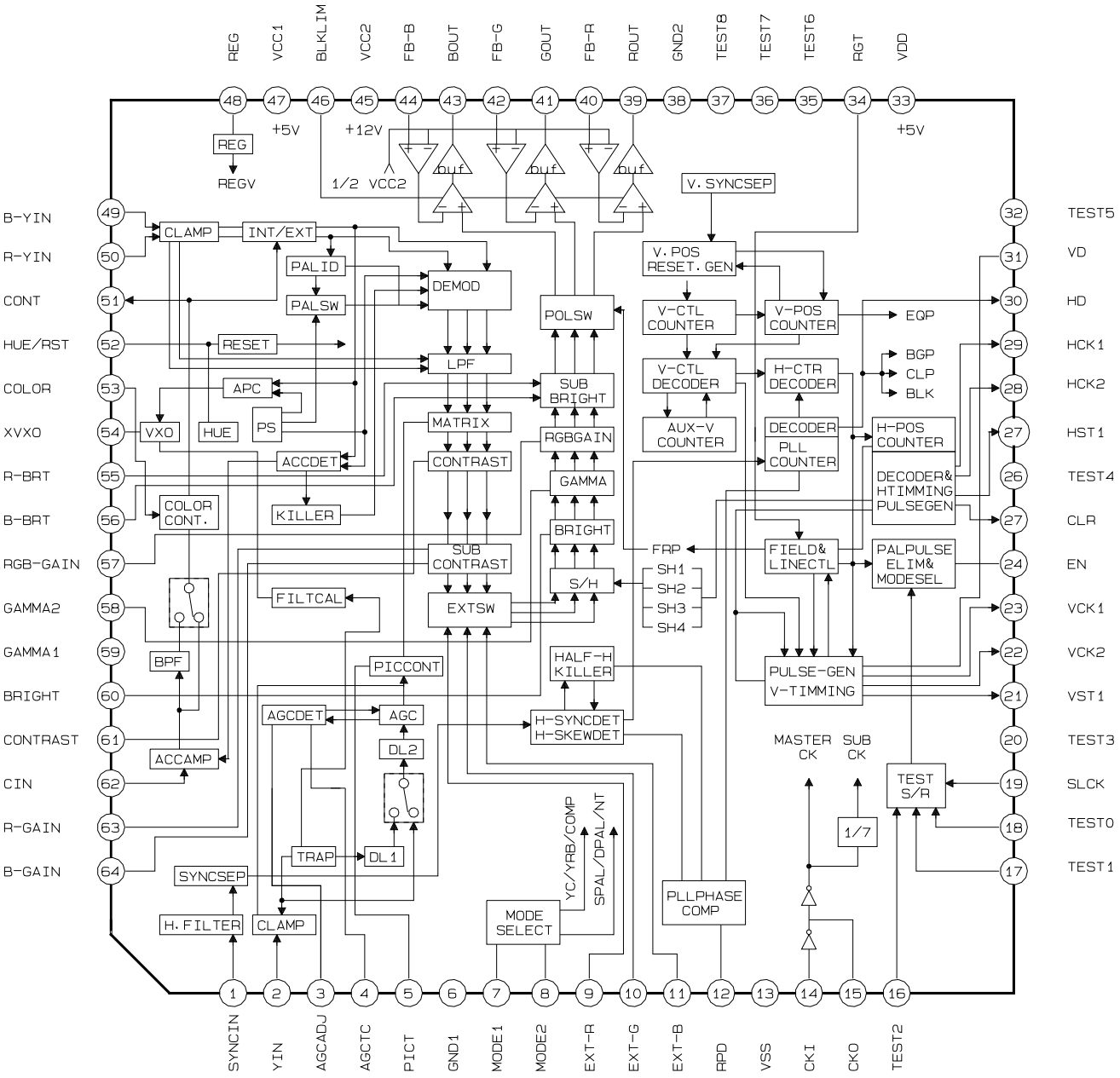
2-2-13 ICZ07(KS7314)



2-2-14 ICE01(KA7007)



2-2-15 ICE01(CXA1854AR)-CVF



MEMO

3. Product Specifications and Comparison Chart

3-1 Product Specifications

Design and specifications are subject to change without notice.

Operation	Description
SYSTEM	
Recording systems	Video : 2 rotary heads, helical FM scanning; Audio : FM system
Video signal	PAL colour, CCIR standard
Cassette format	8 mm
Tape speed	SP mode (Standard Play) : approx. 20.051 mm/sec
Recording/playback time	SP mode (Standard Play) : 1 hour 30 minutes (P5-90)
Fast-forward/rewind time	Approx. 4 min. (P5-60)
Image device	CCD (Charge Coupled Device)
Viewfinder	VP-A12/VP-A17 : Black and White electronic viewfinder VP-A15/VP-A18 : Colour electronic viewfinder
Lens	VP-A12/VP-A15 : Combined 16X power zoom and 32X digital zoom VP-A17/VP-A18 : Combined 16X power zoom and 32X digital zoom f=3.9~62.4mm, F1.4 auto wide macro; filter diameter 46 mm.
Automatic focus system	Inner
Colour temperature	Auto
Lighting	> 300 lux (28 footcandles)
Aperture correction	Automatic with back light adjustment
INPUT/OUTPUT CONNECTORS	
Video output	Phono jack, 1Vp-p, 75 ohms, unbalanced, SYNC negative
Audio output	Phono jack, 7.5dBs for an output impedance of less than 2.2 Kohms
RFU DC OUT	Special mini-jack, 5V DC
Earphone output	Minijack, 8 ohms
Ext Mic.	Minijack, ø3.5 mm
GENERAL	
Power requirement	AC power adaptor (6.0V) ; battery pack (6.0V)
Power consumption	VP-A12/VP-A15 : 5.0W, VP-A17/VP-A18 : 5.7W (in camera mode)
Tripod attachment thread	Attachment screw less than 9mm long
Microphone	VP-A12 : Electric condensor microphone, omni-directional, manual type VP-A15/A17/A18 : Electric condensor microphone, omni-directional, stereo type
Temperature range	Operation : 0°C to 40°C (32°F to 104°F); storage : -20°C to 60°C (-4°F to 140°F)
Dimensions/weight	Appros. 110 X 114 X 224 mm (4.3 X 4.5 X 8.8 inches) ; approx. 760 g (1.65 lbs) including lens cap, excluding battery pack and cassette

3-2 Comparison Chart

MODEL / FUNCTION	VP-A12	VP-A15	VP-A17	VP-A18	REMARK
MICROPHONE	MONO	STEREO	STEREO	STEREO	
VIEWFINDER	EVF	CVF	EVF	CVF	
D.ZOOM	X24 D.ZOOM	X24 D.ZOOM	X64 D.ZOOM	X64 D.ZOOM	
EIS	X	X	O	O	
WIDE	X	X	O	O	

4. Disassembly and Reassembly

4-1 Cabinet Disassembly

4-1-1 Ass'y Cover Housing Removal

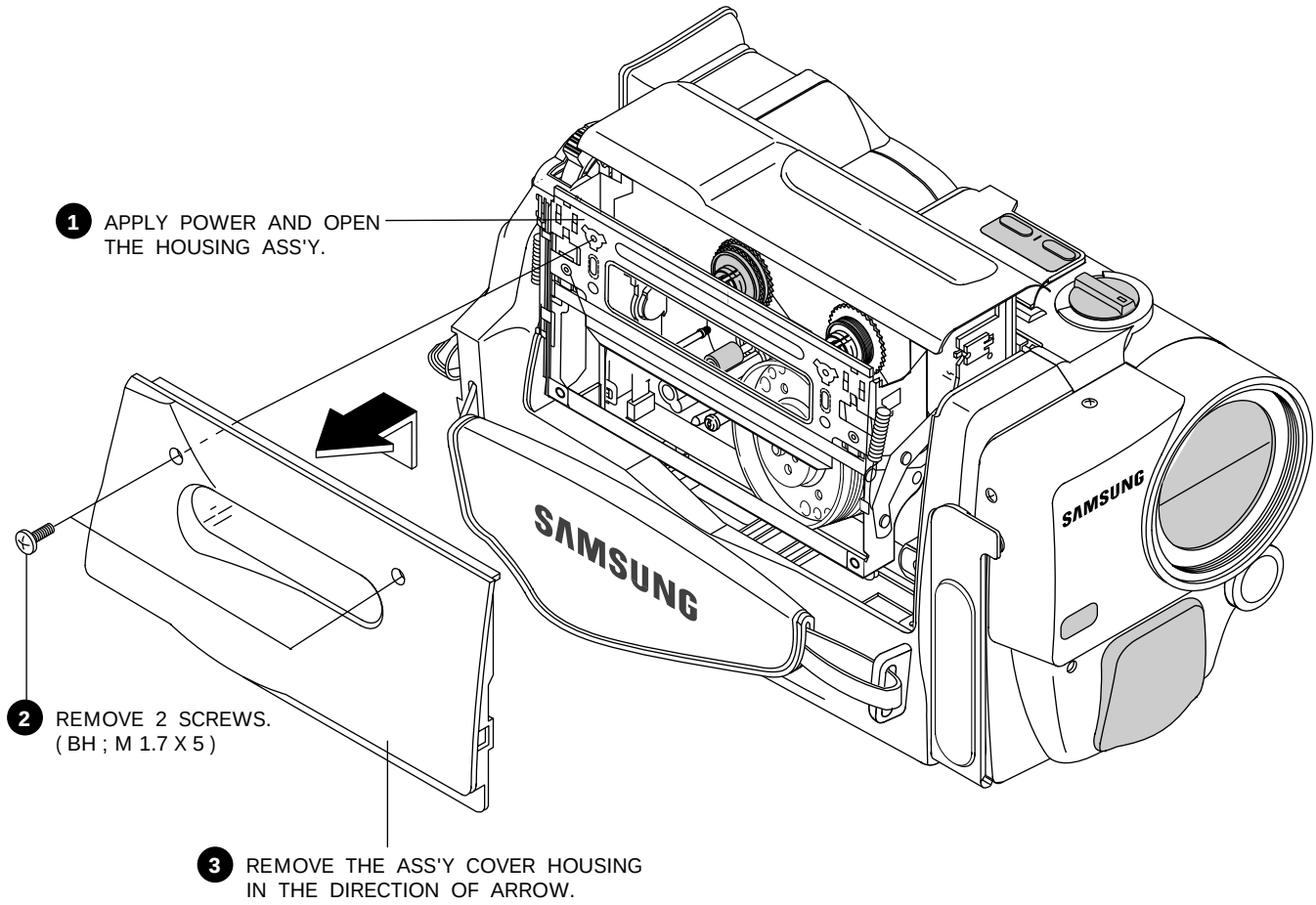

1 APPLY POWER AND OPEN THE HOUSING ASS'Y.
2 REMOVE 2 SCREWS. (BH ; M 1.7 X 5)
3 REMOVE THE ASS'Y COVER HOUSING IN THE DIRECTION OF ARROW.
SAMSUNG
SAMSUNG

Fig. 4-1 Ass'y Cover Housing Removal

4-1-2 Ass'y Case Top Removal

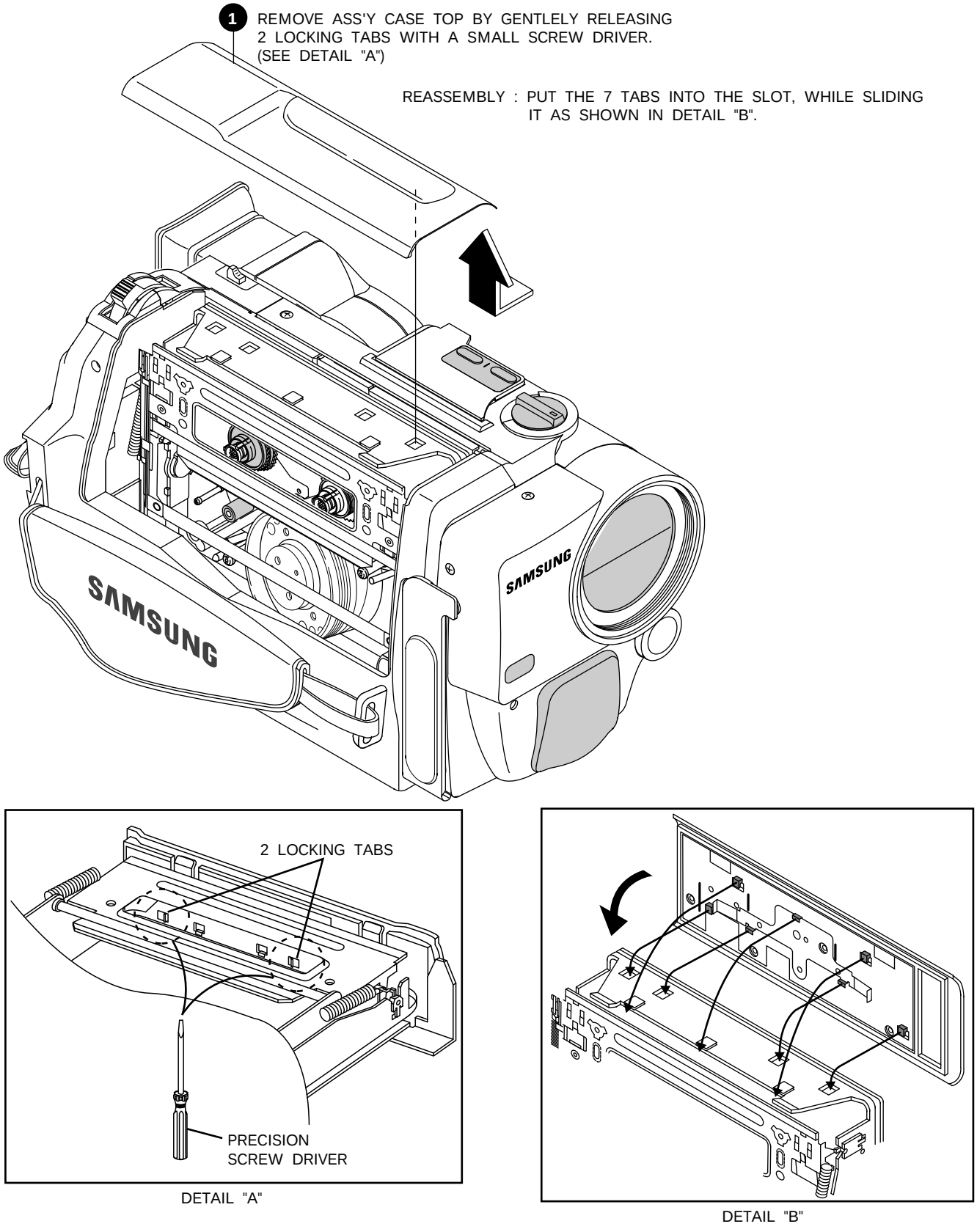


Fig. 4-2 Ass'y Case Top Removal

4-1-3 Ass'y Front Removal (1)

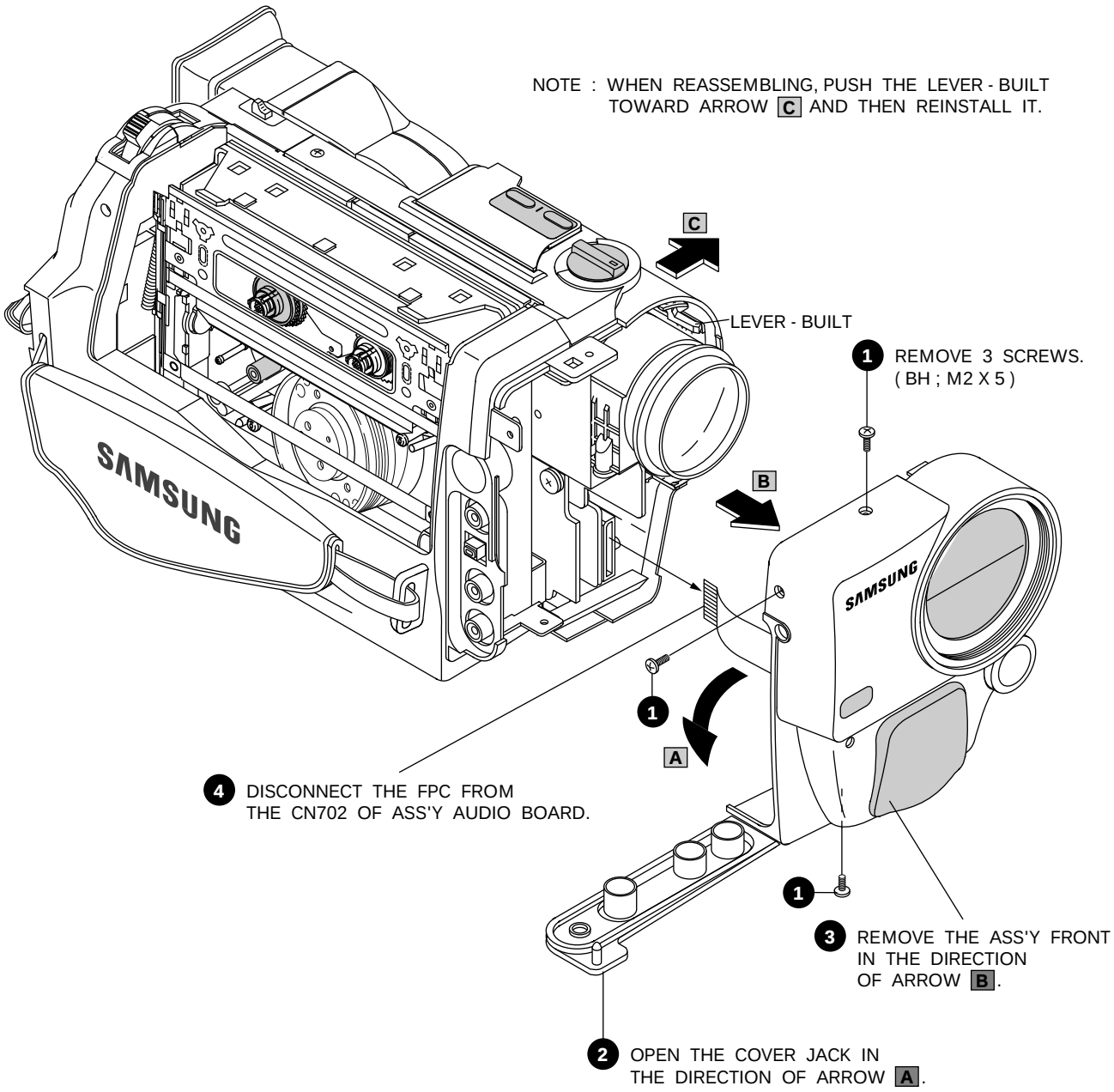
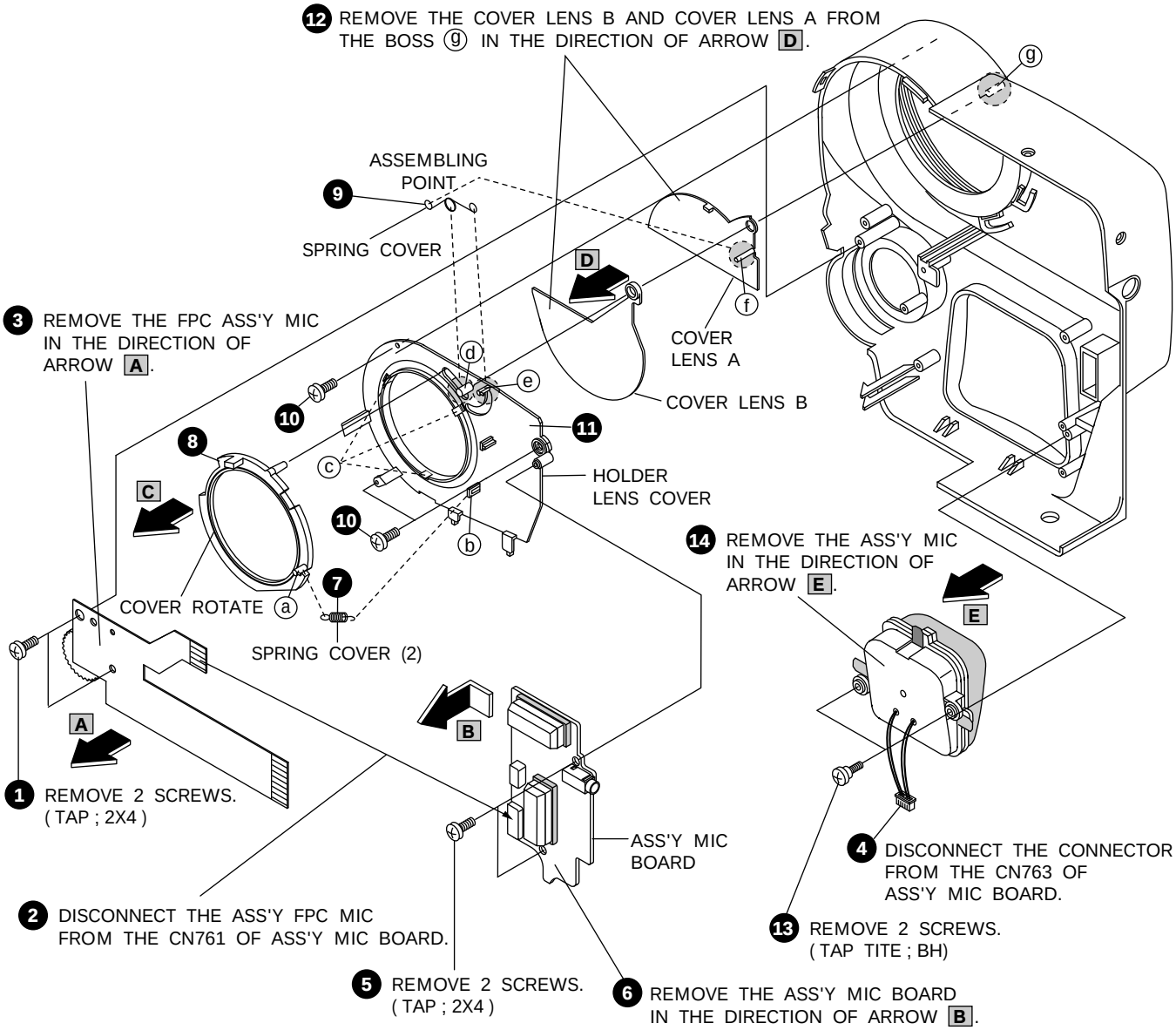

NOTE : WHEN REASSEMBLING, PUSH THE LEVER - BUILT TOWARD ARROW C AND THEN REINSTALL IT.
C
LEVER - BUILT
1 REMOVE 3 SCREWS. (BH ; M2 X 5)
B
SAMSUNG
SAMSUNG
1
A
4 DISCONNECT THE FPC FROM THE CN702 OF ASS'Y AUDIO BOARD.
1
3 REMOVE THE ASS'Y FRONT IN THE DIRECTION OF ARROW B.
2 OPEN THE COVER JACK IN THE DIRECTION OF ARROW A.

Fig. 4-3 Ass'y Front Removal (1)

4-1-4 Ass'y Front Removal (2)


12 REMOVE THE COVER LENS B AND COVER LENS A FROM THE BOSS ⓖ IN THE DIRECTION OF ARROW D.
ASSEMBLING POINT
9
SPRING COVER
D
3 REMOVE THE FPC ASS'Y MIC IN THE DIRECTION OF ARROW A.
COVER LENS A
COVER LENS B
10
11
8
C
HOLDER LENS COVER
10
14 REMOVE THE ASS'Y MIC IN THE DIRECTION OF ARROW E.
E
COVER ROTATE ⓐ
7
SPRING COVER (2)
A
B
1 REMOVE 2 SCREWS. (TAP ; 2X4)
ASS'Y MIC BOARD
4 DISCONNECT THE CONNECTOR FROM THE CN763 OF ASS'Y MIC BOARD.
2 DISCONNECT THE ASS'Y FPC MIC FROM THE CN761 OF ASS'Y MIC BOARD.
13 REMOVE 2 SCREWS. (TAP TITE ; BH)
5 REMOVE 2 SCREWS. (TAP ; 2X4)
6 REMOVE THE ASS'Y MIC BOARD IN THE DIRECTION OF ARROW B.

7 REMOVE THE SPRING COVER (2) FROM THE COVER ROTATE OF HOOK ⓐ AND HOLDER LENS COVER OF HOOK ⓑ.

8 REMOVE THE COVER ROTATE IN THE DIRECTION OF ARROW C AFTER PUSHING THE 3 TABS ⓒ.

9 REMOVE THE SPRING COVER FROM THE HOLDER LENS COVER HOOK ⓓ, ⓔ AND HOLDER LENS A HOOK ⓕ.

10 REMOVE 3 SCREWS.
(TAP ; 2X4)

11 REMOVE THE HOLDER LENS COVER.

Fig. 4-4 Ass'y Front Removal (2)

4-1-5 Unit Case Right Removal

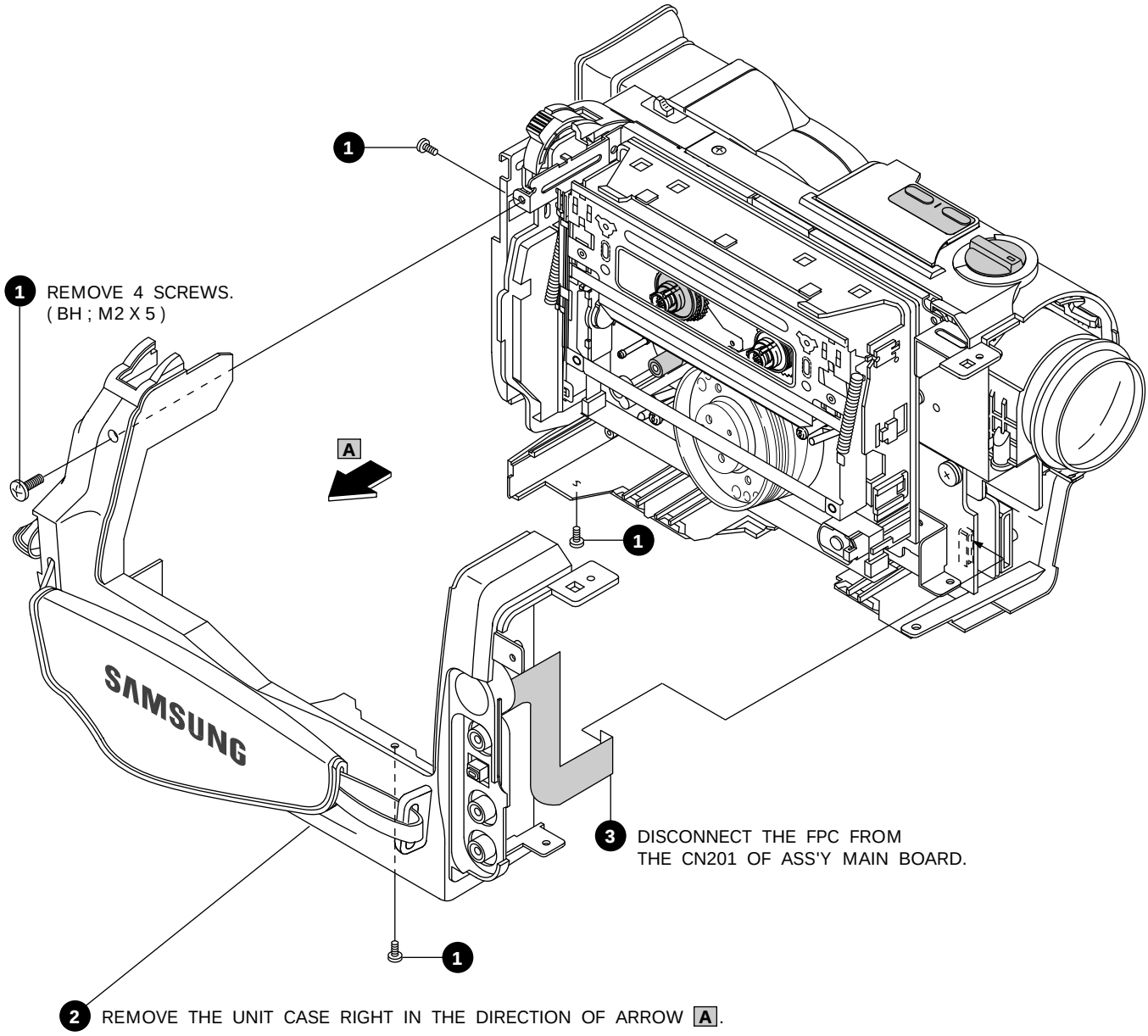


Fig. 4-5 Unit Case Right Removal

4-1-6 Ass'y Case Left Removal (1)

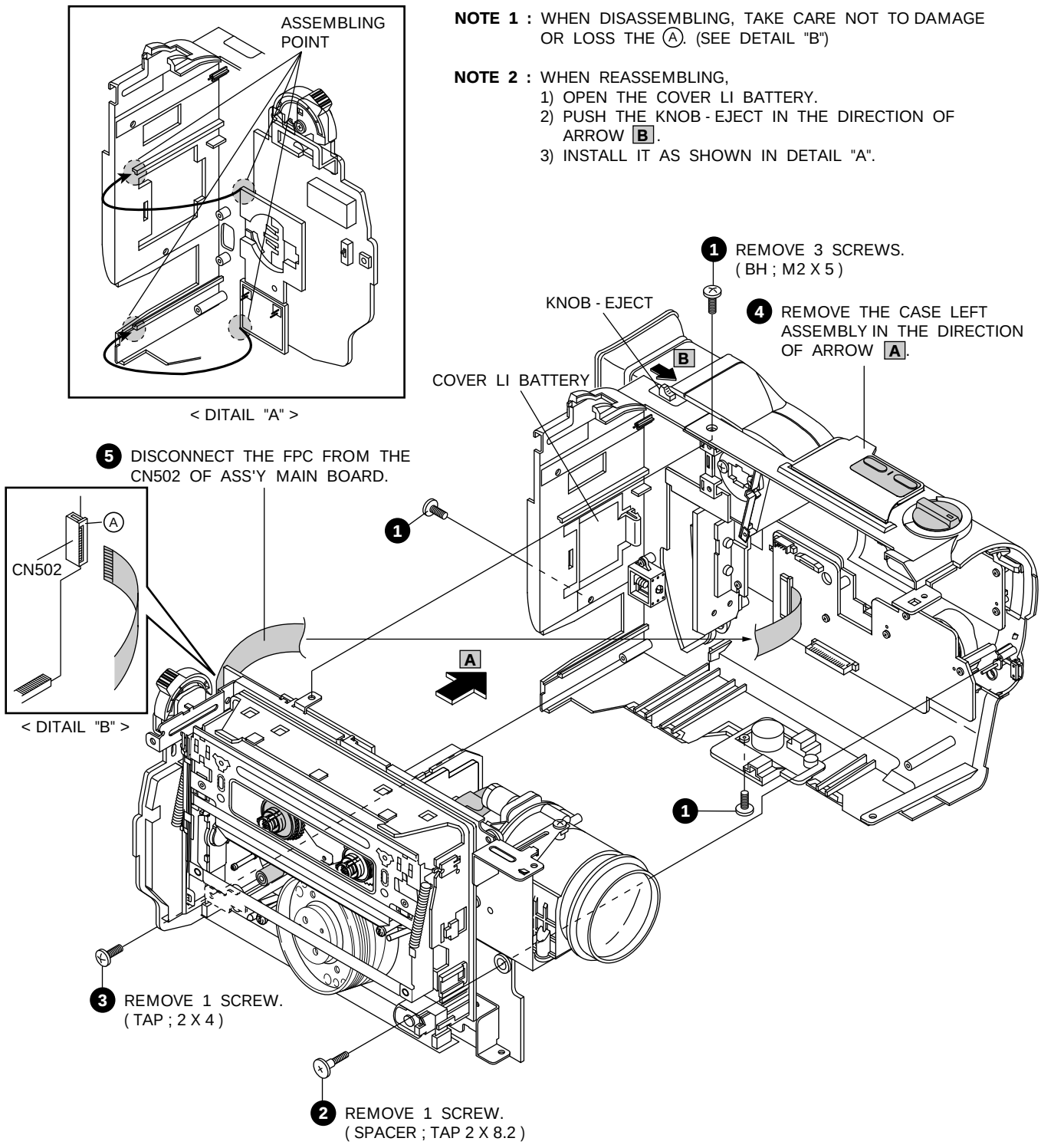
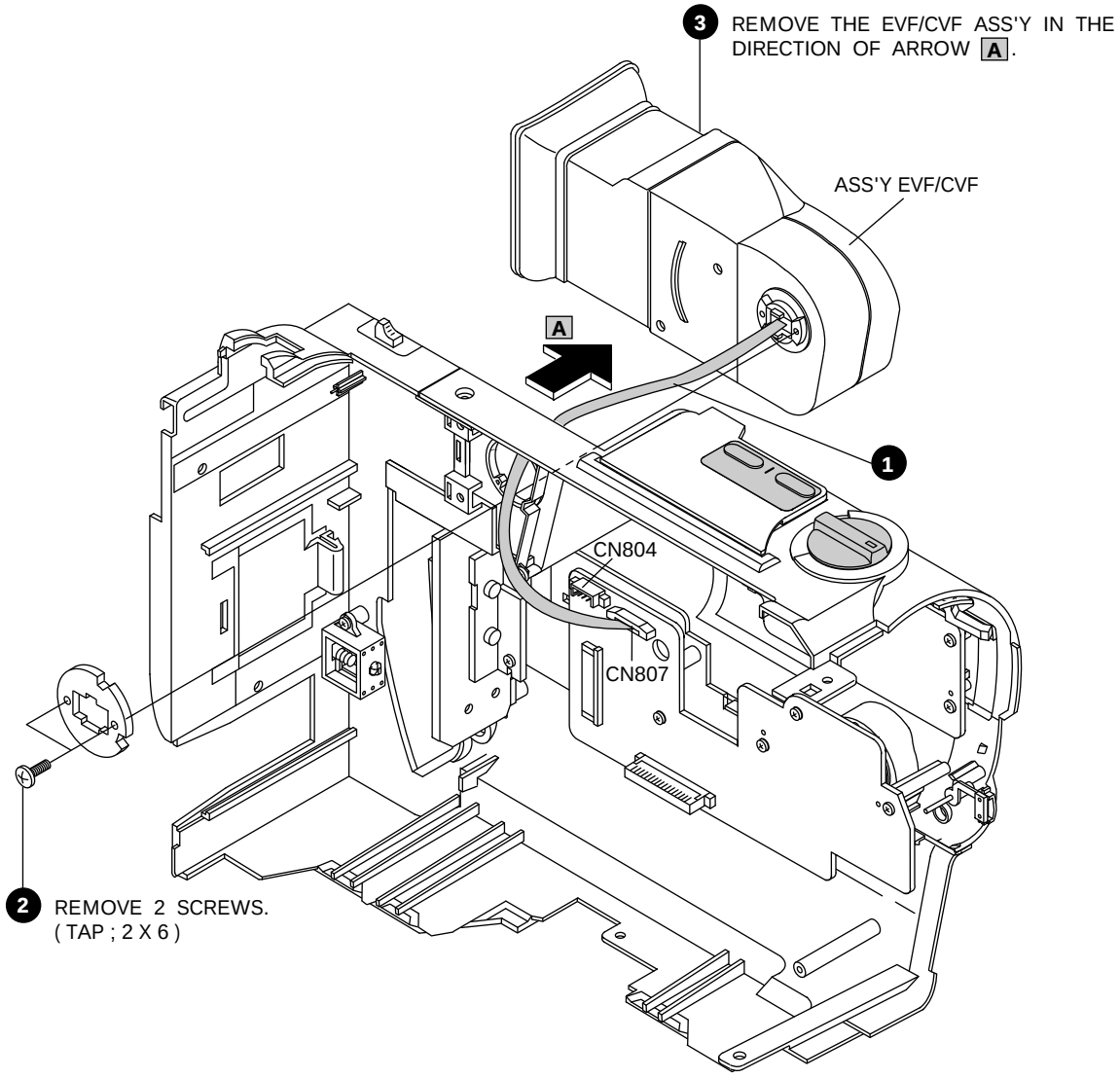

ASSEMBLING POINT
< DITAIL "A" >
NOTE 1 : WHEN DISASSEMBLING, TAKE CARE NOT TO DAMAGE OR LOSS THE Ⓐ. (SEE DETAIL "B")
NOTE 2 : WHEN REASSEMBLING,
1) OPEN THE COVER LI BATTERY.
2) PUSH THE KNOB - EJECT IN THE DIRECTION OF ARROW B .
3) INSTALL IT AS SHOWN IN DETAIL "A".
1 REMOVE 3 SCREWS. (BH ; M2 X 5)
KNOB - EJECT
4 REMOVE THE CASE LEFT ASSEMBLY IN THE DIRECTION OF ARROW A.
COVER LI BATTERY
B
5 DISCONNECT THE FPC FROM THE CN502 OF ASS'Y MAIN BOARD.
CN502
Ⓐ
< DITAIL "B" >
A
3 REMOVE 1 SCREW. (TAP ; 2 X 4)
2 REMOVE 1 SCREW. (SPACER ; TAP 2 X 8.2)

Fig. 4-6 Ass'y Case Left Removal (1)

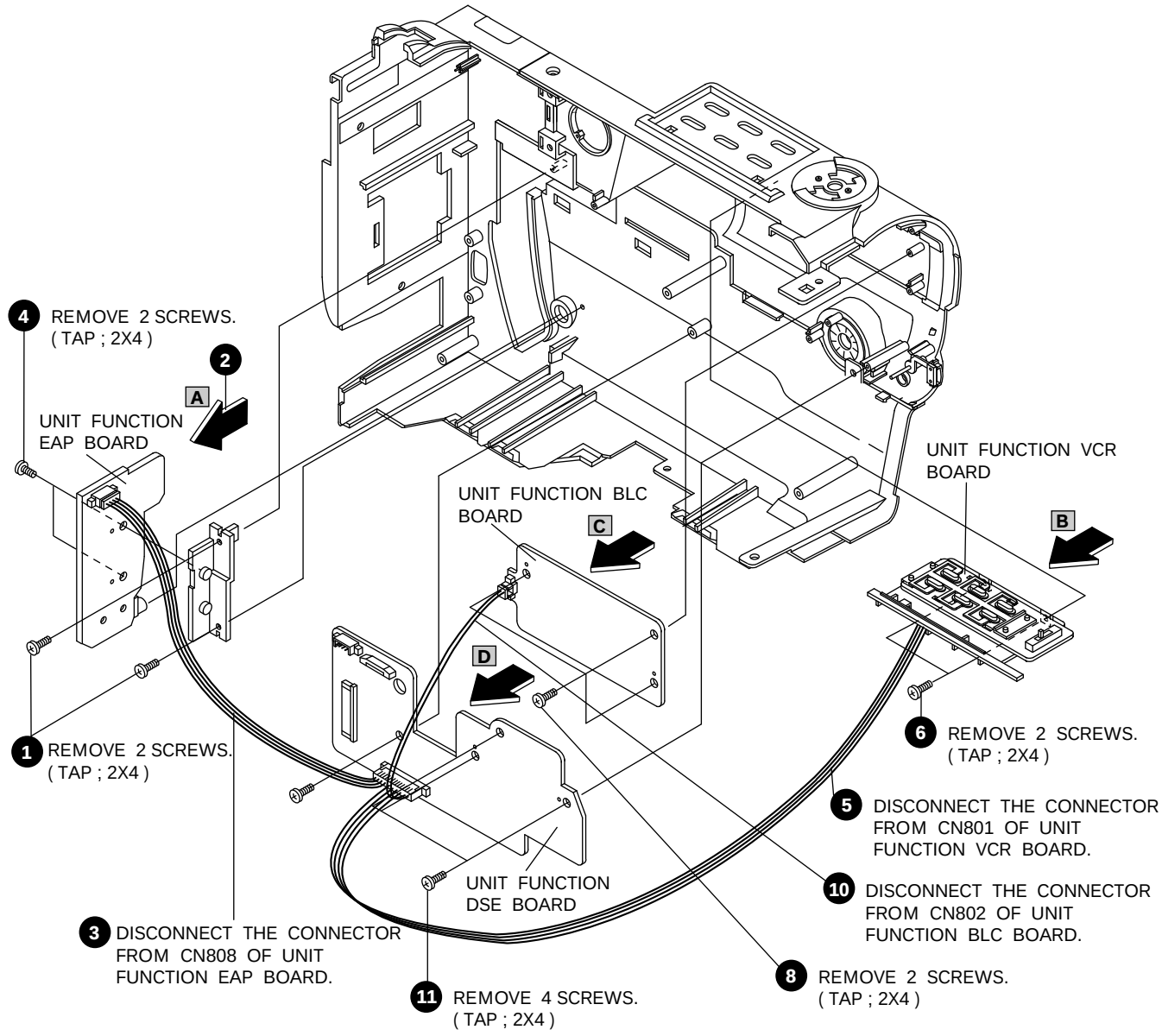
4-1-7 Ass'y EVF/CVF Removal



1 CVF : DISCONNECT THE FPC FROM THE CN807 OF UNIT FUNCTION DSE BOARD.
EVF : DISCONNECT THE LEAD CONNECTOR ASS'Y FROM THE CN804 OF UNIT FUNCTION DSE BOARD.

Fig. 4-7 Ass'y EVF/CVF Removal

4-1-8 Ass'y Case Left Removal (2)


4 REMOVE 2 SCREWS. (TAP ; 2X4)
2
A
UNIT FUNCTION EAP BOARD
UNIT FUNCTION BLC BOARD
C
UNIT FUNCTION VCR BOARD
B
D
1 REMOVE 2 SCREWS. (TAP ; 2X4)
6 REMOVE 2 SCREWS. (TAP ; 2X4)
5 DISCONNECT THE CONNECTOR FROM CN801 OF UNIT FUNCTION VCR BOARD.
10 DISCONNECT THE CONNECTOR FROM CN802 OF UNIT FUNCTION BLC BOARD.
UNIT FUNCTION DSE BOARD
3 DISCONNECT THE CONNECTOR FROM CN808 OF UNIT FUNCTION EAP BOARD.
8 REMOVE 2 SCREWS. (TAP ; 2X4)
11 REMOVE 4 SCREWS. (TAP ; 2X4)

2 REMOVE THE UNIT FUNCTION EAP BOARD IN THE DIRECTION OF ARROW A.

7 REMOVE THE UNIT FUNCTION VCR BOARD IN THE DIRECTION OF ARROW B.

9 REMOVE THE UNIT FUNCTION BLC BOARD IN THE DIRECTION OF ARROW C.

12 REMOVE THE UNIT FUNCTION DSE BOARD IN THE DIRECTION OF ARROW D.

Fig. 4-8 Ass'y Case Left Removal (2)

4-1-9 Ass'y 8mm Deck, Ass'y Main Board and DC/DC Converter Removal

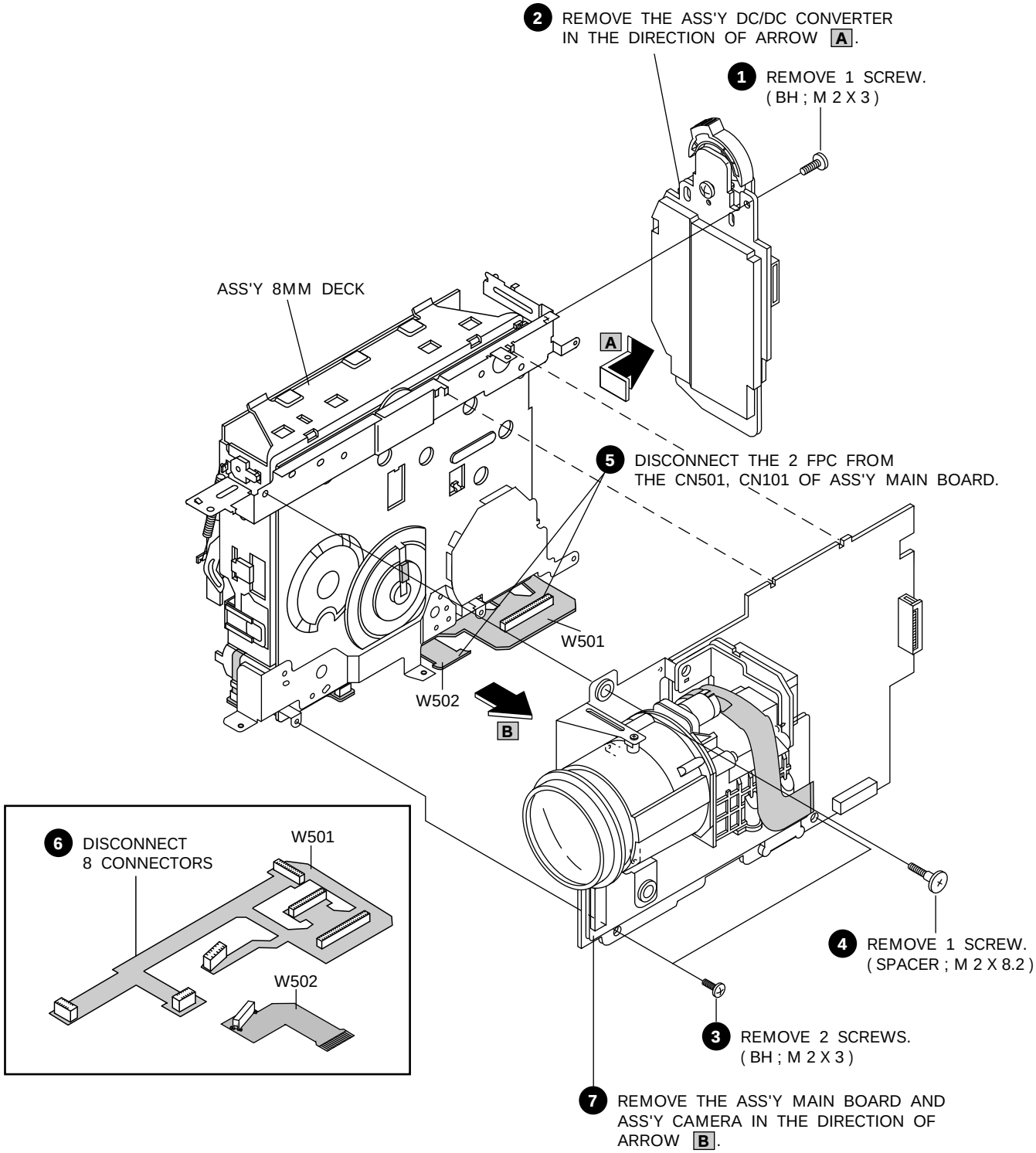

2 REMOVE THE ASS'Y DC/DC CONVERTER IN THE DIRECTION OF ARROW A.
1 REMOVE 1 SCREW. (BH ; M 2 X 3)
ASS'Y 8MM DECK
A
5 DISCONNECT THE 2 FPC FROM THE CN501, CN101 OF ASS'Y MAIN BOARD.
W501
W502
B
6 DISCONNECT 8 CONNECTORS
W501
W502
4 REMOVE 1 SCREW. (SPACER ; M 2 X 8.2)
3 REMOVE 2 SCREWS. (BH ; M 2 X 3)
7 REMOVE THE ASS'Y MAIN BOARD AND ASS'Y CAMERA IN THE DIRECTION OF ARROW B.

Fig. 4-9 Ass'y 8mm Deck, Ass'y Main Board and DC/DC Converter Removal

4-1-10 Ass'y Main Board and Ass'y Camera Removal

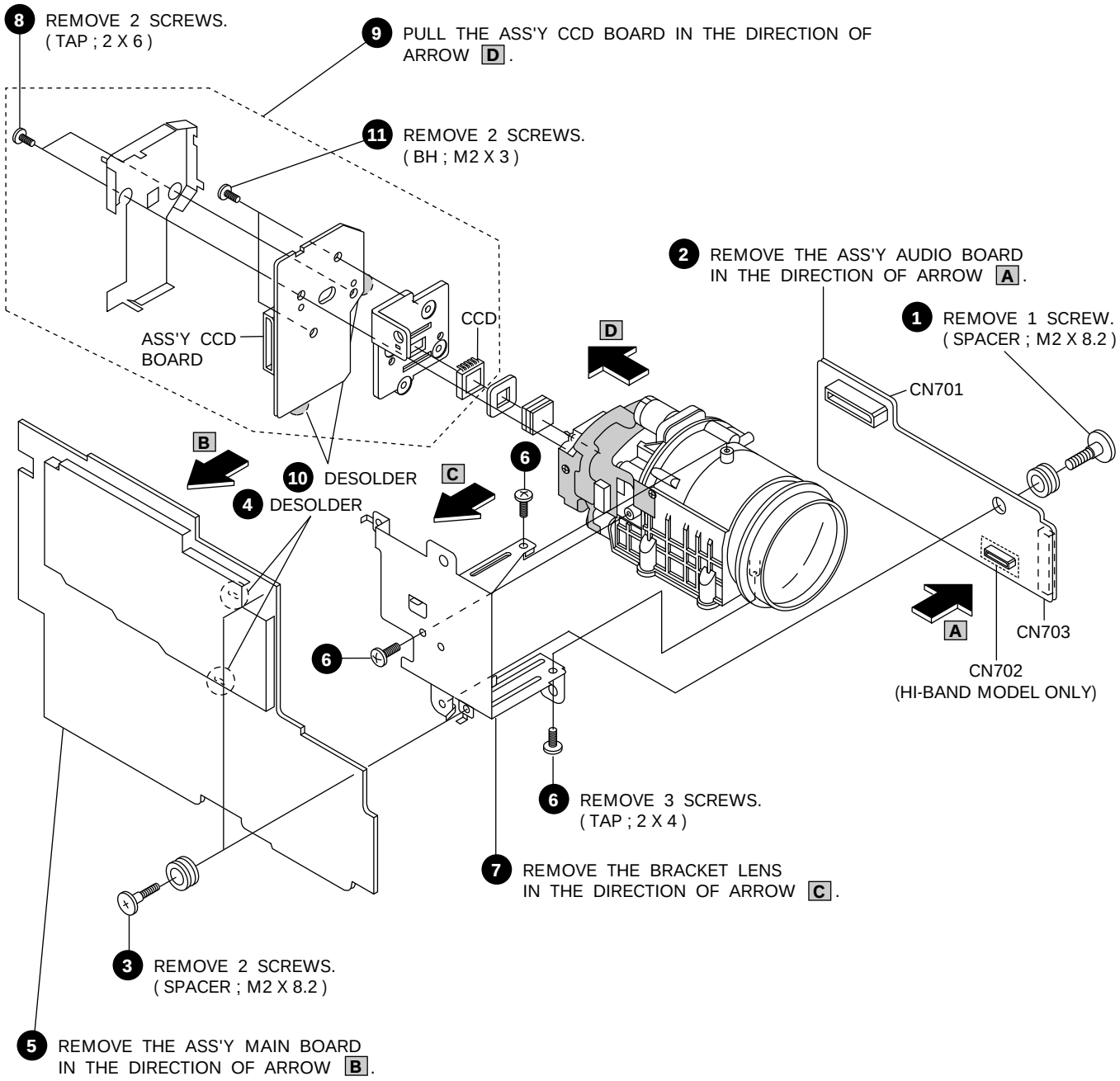

8 REMOVE 2 SCREWS.
(TAP ; 2 X 6)
9 PULL THE ASS'Y CCD BOARD IN THE DIRECTION OF ARROW D .
11 REMOVE 2 SCREWS.
(BH ; M2 X 3)
2 REMOVE THE ASS'Y AUDIO BOARD IN THE DIRECTION OF ARROW A .
1 REMOVE 1 SCREW.
(SPACER ; M2 X 8.2)
ASS'Y CCD BOARD
CCD
D
CN701
B
10 DESOLDER
C
6
4 DESOLDER
A
CN703
CN702
(HI-BAND MODEL ONLY)
6
6 REMOVE 3 SCREWS.
(TAP ; 2 X 4)
7 REMOVE THE BRACKET LENS IN THE DIRECTION OF ARROW C .
3 REMOVE 2 SCREWS.
(SPACER ; M2 X 8.2)
5 REMOVE THE ASS'Y MAIN BOARD IN THE DIRECTION OF ARROW B .

Fig. 4-10 Ass'y Main Board and Ass'y Camera Removal

4-1-11 Ass'y EVF Removal

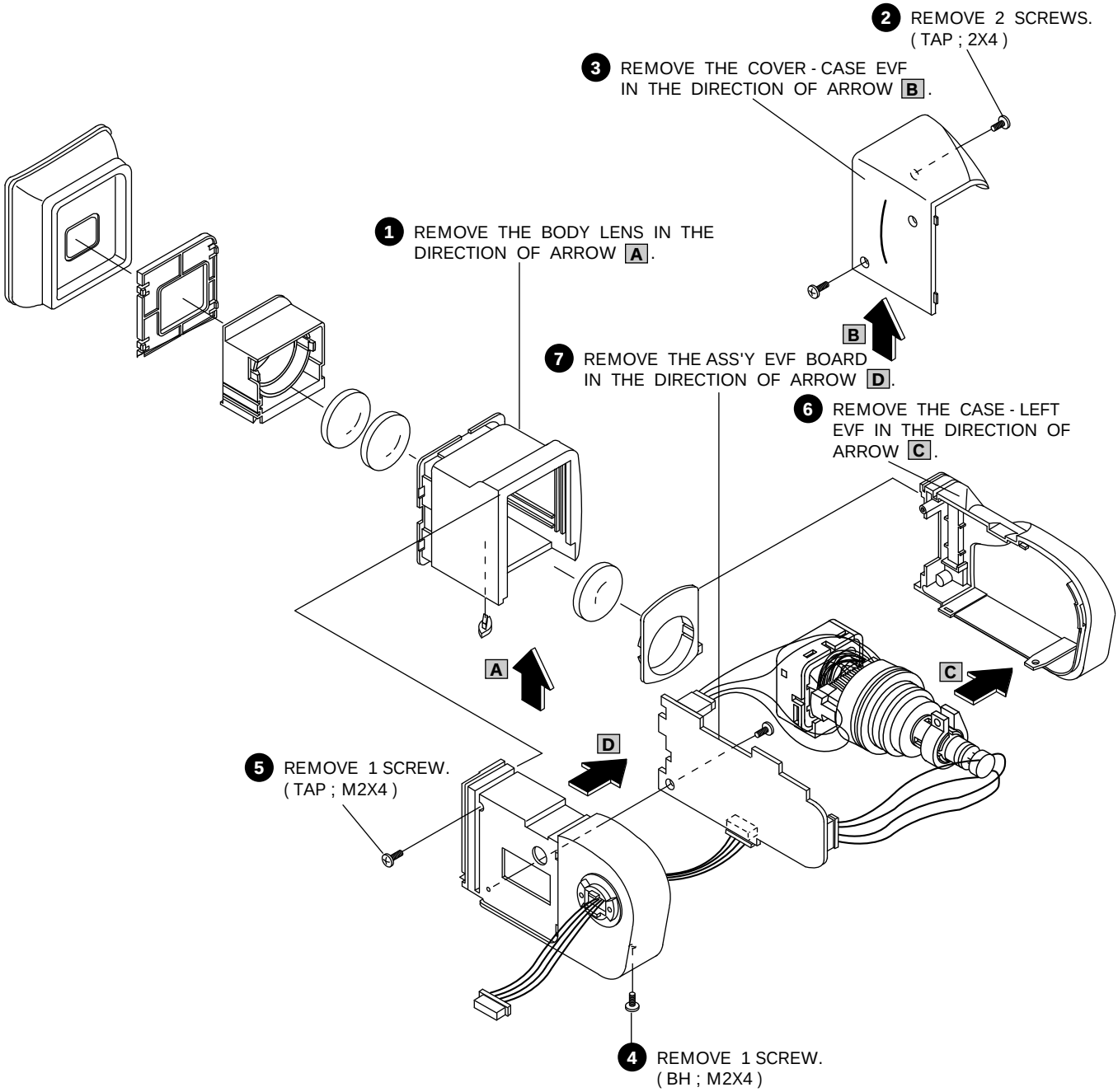

2 REMOVE 2 SCREWS.
(TAP ; 2X4)
3 REMOVE THE COVER - CASE EVF
IN THE DIRECTION OF ARROW B .
1 REMOVE THE BODY LENS IN THE
DIRECTION OF ARROW A .
B
7 REMOVE THE ASS'Y EVF BOARD
IN THE DIRECTION OF ARROW D .
6 REMOVE THE CASE - LEFT
EVF IN THE DIRECTION OF
ARROW C .
A
C
D
5 REMOVE 1 SCREW.
(TAP ; M2X4)
4 REMOVE 1 SCREW.
(BH ; M2X4)

Fig. 4-11 Ass'y EVF Removal

4-1-12 Ass'y CVF Removal

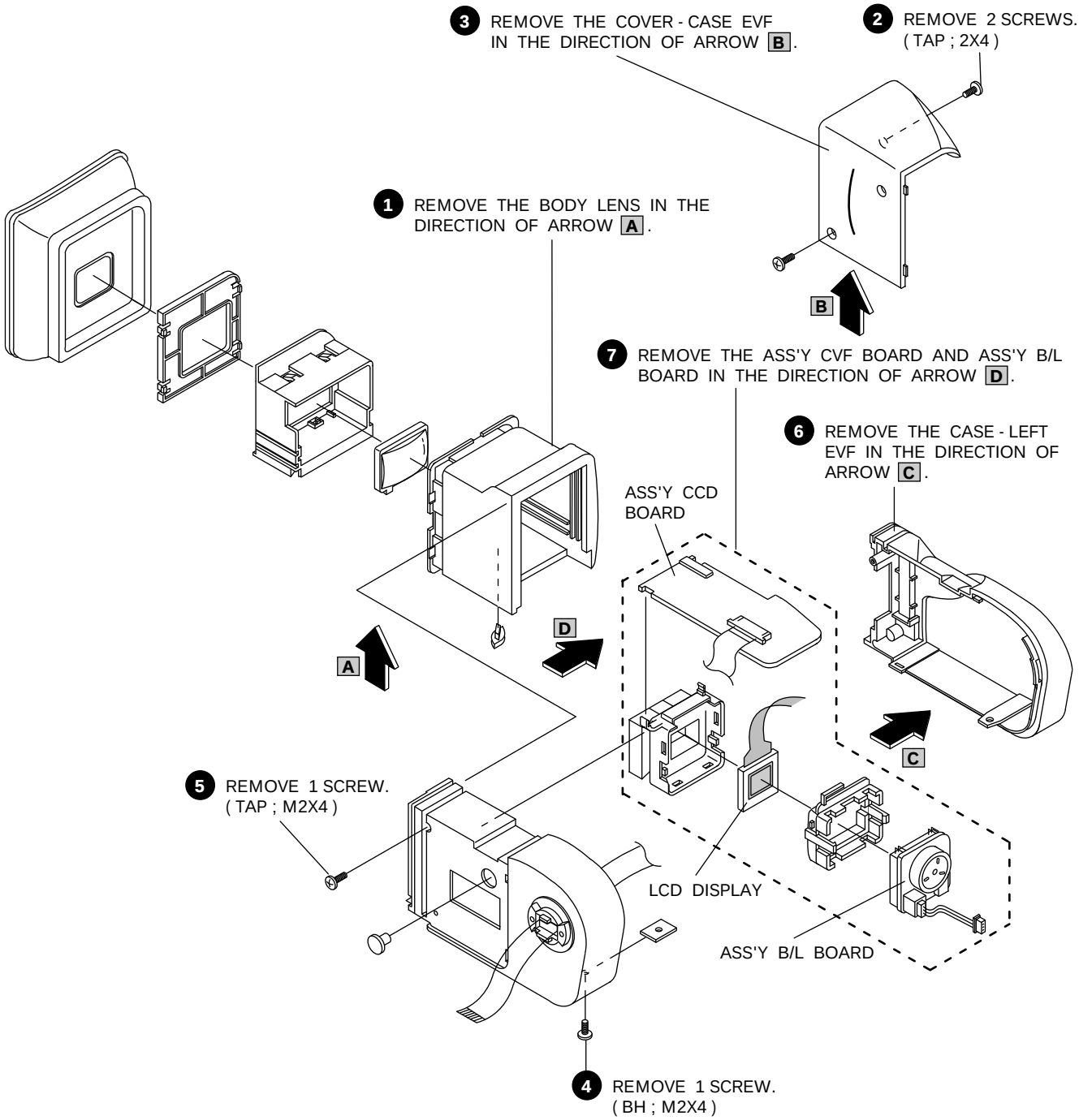

3 REMOVE THE COVER - CASE EVF IN THE DIRECTION OF ARROW B.
2 REMOVE 2 SCREWS. (TAP ; 2X4)
1 REMOVE THE BODY LENS IN THE DIRECTION OF ARROW A.
B
7 REMOVE THE ASS'Y CVF BOARD AND ASS'Y B/L BOARD IN THE DIRECTION OF ARROW D.
6 REMOVE THE CASE - LEFT EVF IN THE DIRECTION OF ARROW C.
ASS'Y CCD BOARD
D
A
C
5 REMOVE 1 SCREW. (TAP ; M2X4)
LCD DISPLAY
ASS'Y B/L BOARD
4 REMOVE 1 SCREW. (BH ; M2X4)

Fig. 4-12 Ass'y CVF Removal

4-2 Circuit Boards Location

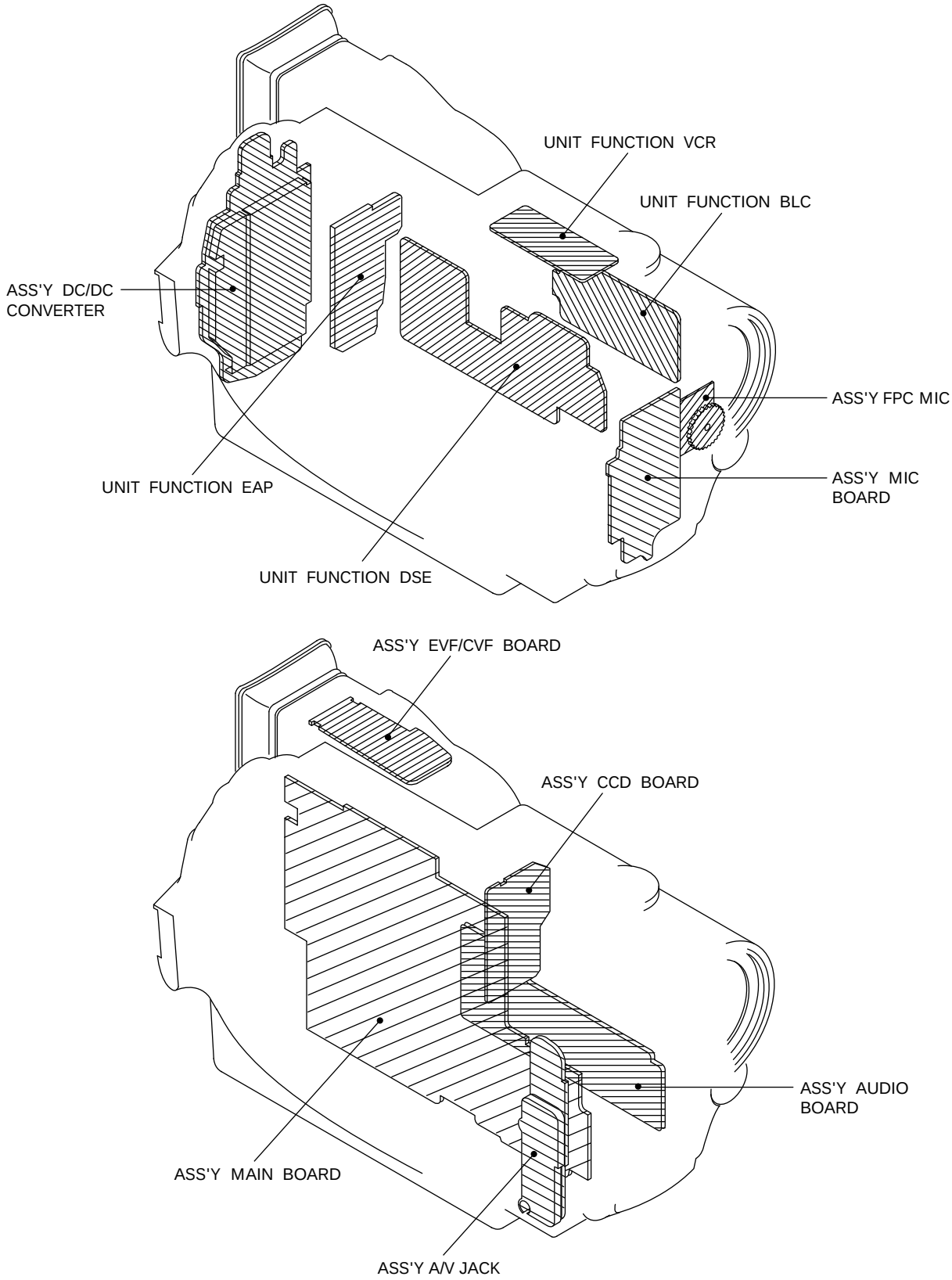
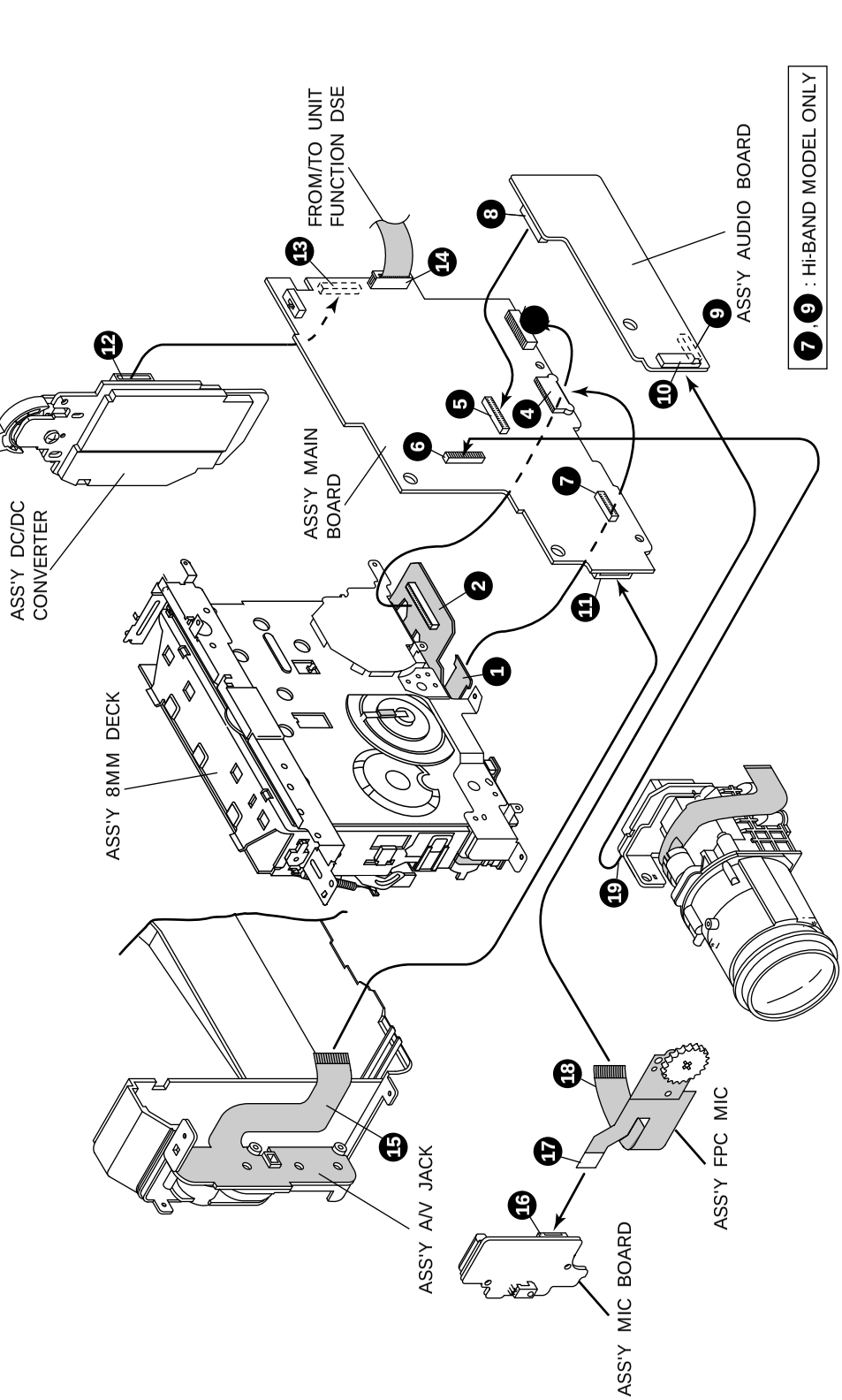


Fig. 4-13 Circuit Boards Location

4-3 Connector Diagrams

4-3-1 Diagram(1)

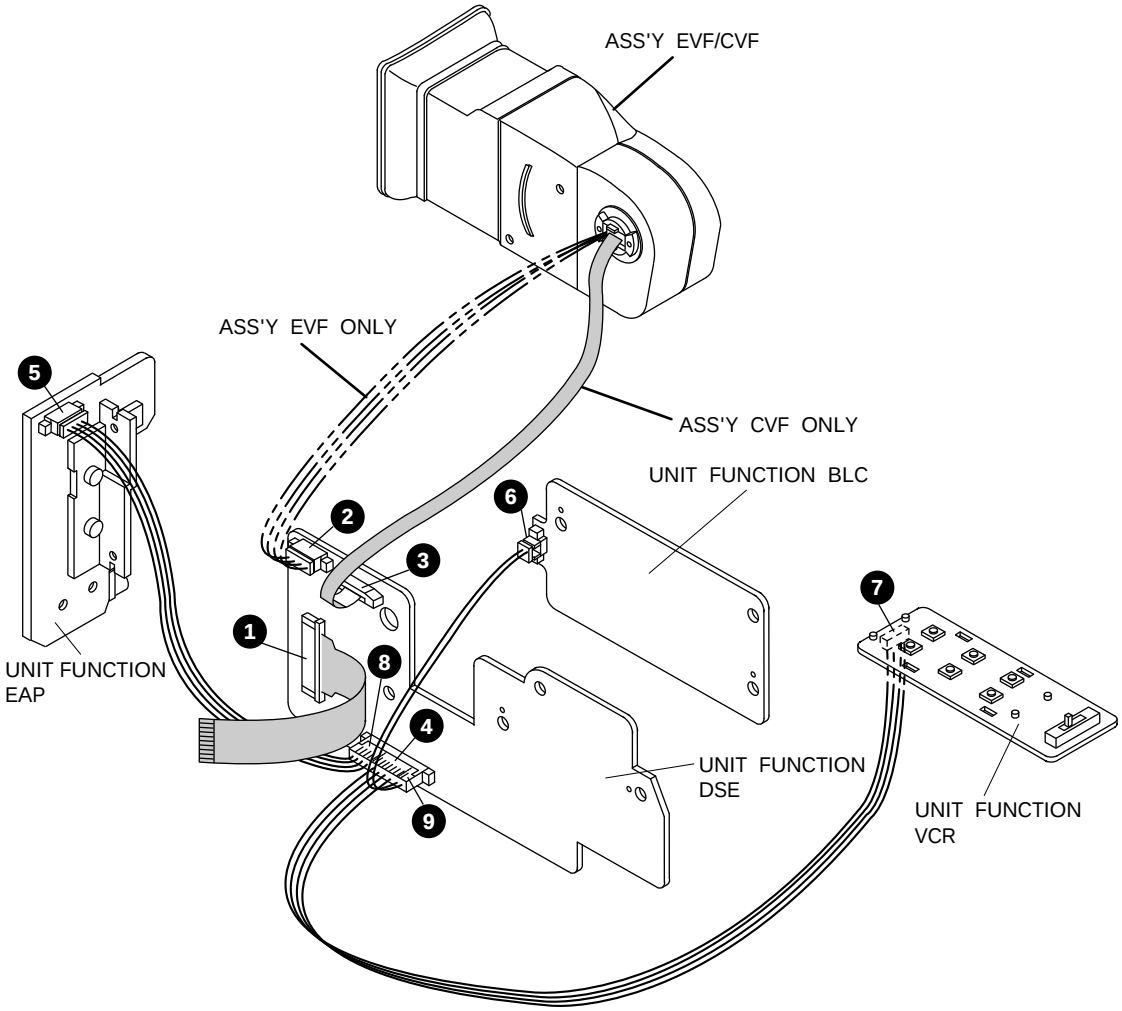


NO	CONN.WAFER LOCA-NO	DIRECTION	CONN.WAFER LOCA-NO
1	W502	FROM/TO ASS'Y MAIN BOARD	CN101
3	CN501	FROM/TO ASS'Y 8MM DECK	W501
5	CN203	ASS'Y MAIN BOARD ◀▬▶ ASS'Y AUDIO BOARD	CN701
7	CN202	ASS'Y MAIN BOARD ◀▬▶ ASS'Y AUDIO BOARD	CN703
9	CN703	ASS'Y AUDIO BOARD ◀▬▶ ASS'Y MAIN BOARD	CN202
11	CN201	ASS'Y MAIN BOARD ◀▬▶ ASS'Y AV JACK	-
13	CN503	ASS'Y MAIN BOARD ◀▬▶ ASS'Y DC/DC CONVERTER	CN901
15	-	ASS'Y AV JACK ◀▬▶ ASS'Y MAIN BOARD	CN201
17	-	FROM/TO ASS'Y MIC BOARD	CN761
19	CND01	ASS'Y CCD BOARD ◀▬▶ ASS'Y MAIN BOARD	CNP01

NO	CONN.WAFER LOCA-NO	DIRECTION	CONN.WAFER LOCA-NO
2	W501	FROM/TO ASS'Y MAIN BOARD	CN501
4	CN101	FROM/TO ASS'Y 8MM DECK	W502
6	CNP01	ASS'Y MAIN BOARD ◀▬▶ ASS'Y CCD BOARD	CND02
8	CN701	ASS'Y AUDIO BOARD ◀▬▶ ASS'Y MAIN BOARD	CN203
10	CN702	ASS'Y AUDIO BOARD ◀▬▶ ASS'Y FPC MIC	-
12	CN901	ASS'Y DC/DC CONVERTER ◀▬▶ ASS'Y MAIN BOARD	CN503
14	CN502	ASS'Y MAIN BOARD ◀▬▶ UNIT FUNCTION DSE	CN805
16	CN761	FROM/TO ASS'Y FPC MIC	-
18	-	ASS'Y FPC MIC ◀▬▶ ASS'Y AUDIO BOARD	CN702

Fig. 4-14 Circuit Boards Location

4-3-2 Diagram(2)



NO	CONN.WAFER LOCA-NO	DIRECTION	CONN.WAFER LOCA-NO
1	CN805	UNIT FUNCTION DSE◄►ASS'Y MAIN BOARD	CN502
2	CN804	UNIT FUNCTION DSE◄►ASS'Y EVF	-
3	CN807	UNIT FUNCTION DSE◄►ASS'Y CVF	-
4	CN806	UNIT FUNCTION DSE◄►UNIT FUNCTION VCR	CN801
5	CN808	UNIT FUNCTION EAP◄►UNIT FUNCTION DSE	CN806
6	CN802	UNIT FUNCTION BLC◄►UNIT FUNCTION DSE	CN806
7	CN801	UNIT FUNCTION VCR◄►UNIT FUNCTION DSE	CN806
8	CN806	UNIT FUNCTION DSE◄►UNIT FUNCTION EAP	CN808
9	CN806	UNIT FUNCTION DSE◄►UNIT FUNCTION BLC	CN802

MEMO

5. Alignment and Adjustment

5-1 Mechanical Adjustment

1. Refer to mechanical manual "DE-6 (AD68-30200A)" for the adjustment and checks of mechanism section.
2. Short between pin 12 of IC601 and GND in order to set the TEST mode (Track Shift Mode).
3. The location of test point (See Fig.1)

Test Point :
PB RF - Pin 23 of CTP01
Head Switching Trigger - Pin 19 of CTP01

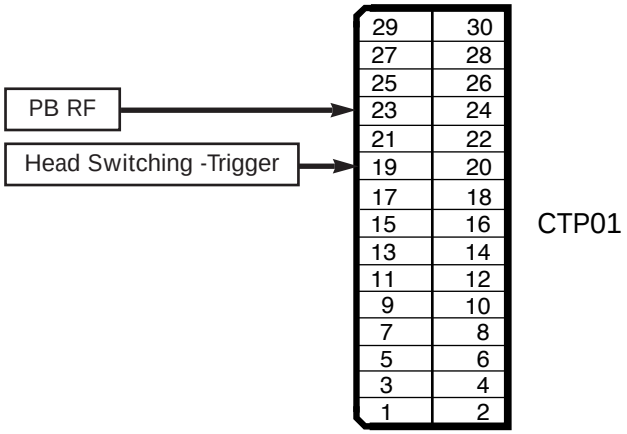
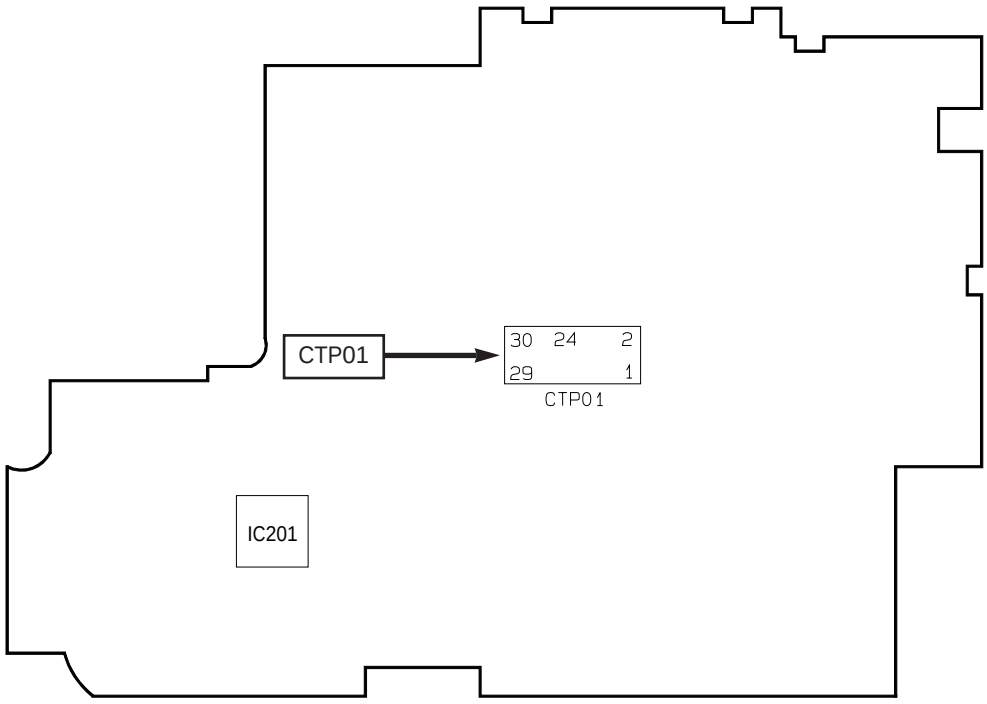


Fig. 1

4. After completing the adjustment, open the pin 12 of IC601 and GND to release the TEST mode.



Main PCB (Component side)

Fig. 2 The location of test point

5-2 Camera Section Adjustment

Note :

1. This system has
   1) EVR (Electronic Variable Resistor) control method by D/A converter instead of VR control method.
   2) EEPROM to store the confirmed adjustment data.
   3) DSP (Digital Signal Process ; ICP05 - Main board) chip to process the signal of camera parts.
   4) One test point for the frequency adjustment of DSP main clock (P. CLK).
   5) The special mode for camera adjustment using remote control card.

2. Keep in mind
   1) Readjustment is needed when the EEPROM (ICA07 of Main board) is replaced.
      The reason is that EEPROM stores confirmed adjustment value of each adjustment step.
   2) All adjustment steps should be performed using the remote control card.
   3) Be sure to perform the adjustment under installing all Assy-Main, CCD, Audio, Front, P.AE, Rear, Terminal board with the unit because remote module is on Front board.

5-2-1 Preparations

1. Equipments to be used

1) DC Power supply
2) Oscilloscope
3) Frequency counter
4) Vectorscope
5) Waveform monitor
6) Colour monitor or TV
7) Various charts
   - Colour bar chart
   - Gray-scale chart, etc...
8) Alignment tape (Lion pattern)
9) Remote control card (Part No.: AD59-10379A)

2. Composition of camera P.C.Boards

1) Main PCB 2) CCD PCB
3) EVF PCB 4) CVF PCB

3. Adjustment preparations

1) Remote control card is used as a camera adjust tool.
2) Press the confirm button when each manual adjustment step is completed to write the adjustment data to the EEPROM.
3) After each adjustment step is completed, OSD shows “OK!”.
4) To cancel the adjustment mode, remove the power source.

4. Remote control

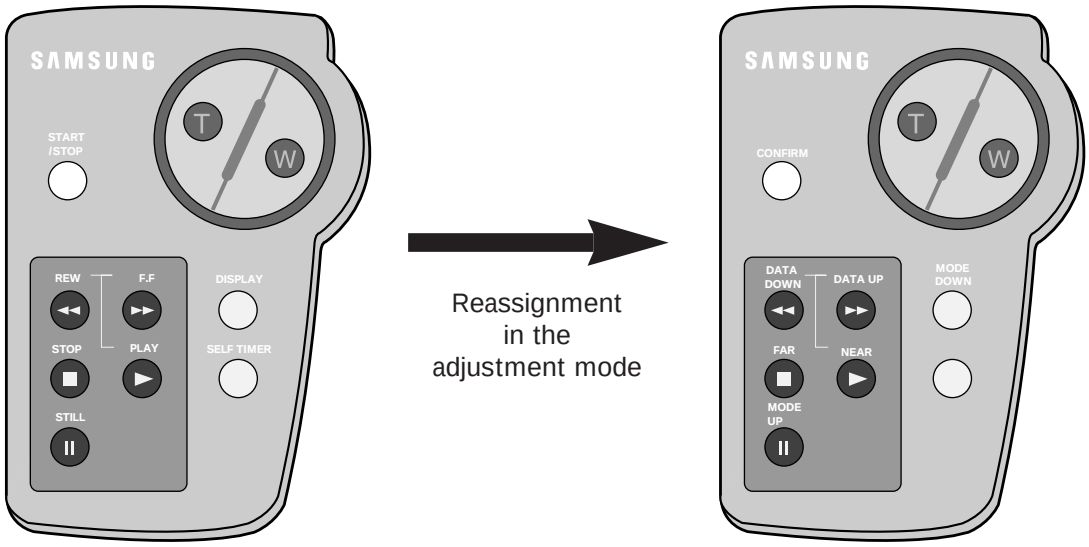
The following is a chart explaining the use of each button :

Using Button	Adjustment
START/STOP(CONFIRM)	Data store after finishing adjustment by DATA UP/DOWN button.
REW (DATA DOWN) FF (DATA UP)	When changing data value of adjust state.
STILL (MODE UP) DISPLAY (MODE DOWN)	Mode change.
STOP (FAR) PLAY (NEAR)	Focus adjustment.
ZOOM (WIDE) (TELE)	Used for manual focus adjustment.

This remote control(accessory unit) is used to control the camcorder additionally, card remote control (Parts No. AD59-10379A) should be used for adjustment of the camera section.

Remote for camcorder
Adjust for jig (Part No. : AD59-10379A)

Figure of button placement when remote is used for service adjustment.



Note : In service adjustment mode, button names are different from those in customer camera function control mode. EX) Start/stop button is the same as confirm.

5. How to get into service "**ADJUST**" mode

STEP 1

1. Remove the lithium battery from the camcorder.
2. Connect the power source (battery/ DC cable).
3. Eject the tape if it is in the unit.
4. Set the power switch of the camcorder to "CAMERA" position.
5. Set OSD on state.

STEP 2

1. Press and hold "DATE" button on camcorder for more than 3 seconds, then it goes into "CLOCK SET" mode. One of the digits will blink.
2. PRESS "STILL" Button 4 times on the camcorder so blinks "00" on the screen.
3. Rotate the DSE dial on the camcorder until "NEGA" shows on the screen.
4. Press and hold the "C/RESET" button and "REW" button on the camcorder at the same time for more than 3 seconds. Then unit goes into service mode. "ADJUST?" blinks on the screen. This indicates that you are ready to adjust any electronic variable resistors.

OSD → 12 :"00": AM 1.JAN.1997

STEP 3

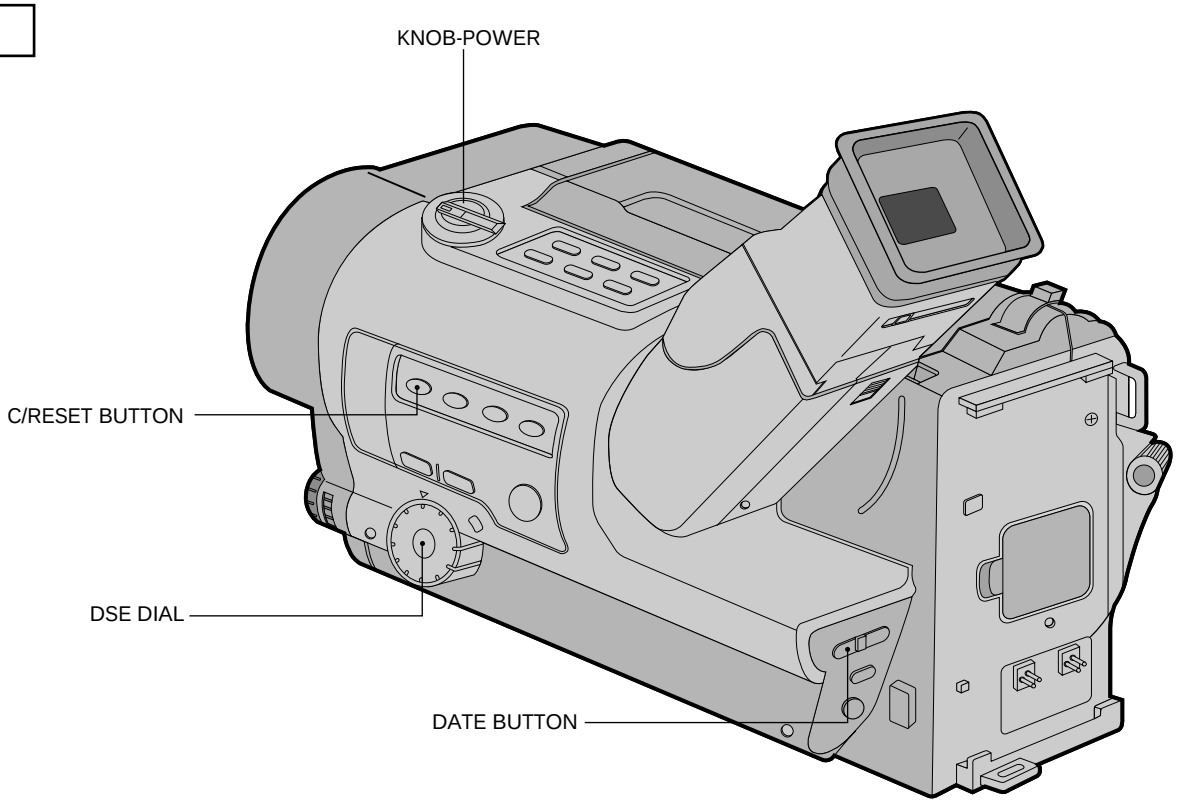
"ADJUST ?" will now be blinking at the center of screen. Now press "START/STOP" button of the remote control.

On screen display show "E2 HALLA XX XX" CAMERA ADJUSTMENT mode has successfully been activated.

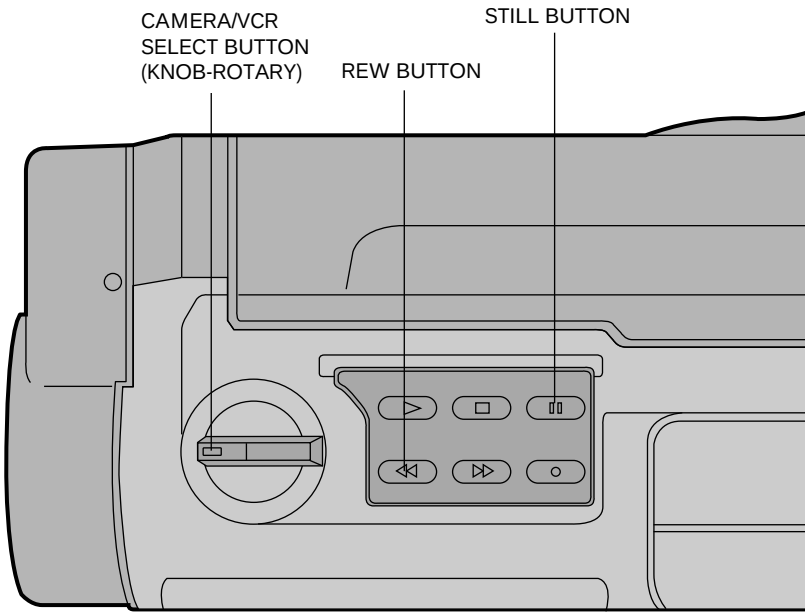
Note : When "XX XX" is shown in service adjustment precedures, this indicates variable values.

5. The location of function button.

SET



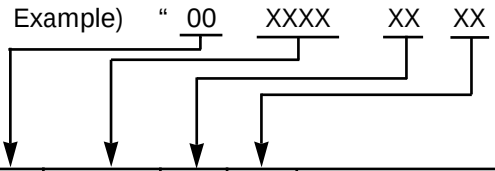
(LEFT VIEW)



(TOP VIEW)

6. Initial data of camera parts adjustment

During camera adjustment, the OSD displays the following abbreviations to indicate the selected mode.



Note : "Data 1" is previous setting in memory, "Data 2" is now adjustment setting, that changes during adjustment mode. After pressing "START/STOP (Confirm)", it goes to memory.

MODE	OSD	DATA1	DATA2	NAME OF ADJUSTMENT
E2	HALLA	FF	FF	HALL AUTO ADJ.
E0	IRISA	FF	FF	IRIS AUTO ADJ. : IRIS CONTROL RANGE
E3	WBA	FF	FF	W/B AUTO ADJ.
E4	LENSA	FF	FF	LENS AUTO ADJ.
D6	Z.CHK	80	80	ZOOM VR A/D CENTER
02	ADREF	70	70	A/D INPUT SIGNAL DC LEVEL ADJ.
03	VREF	3B	3B	Y/C OUTPUT LEVEL OF DSP.
04	P.CLK	40	40	P.CLK ADJUST
05	AGC 1	80	80	AGC CONTROL 1
07	IRIS 1	90	90	IRIS CONTROL 1 ---> #89(AE TARGET)
0C	HAPER	98	98	H AP. FILT SEL/HORIZINTAL APETURE GAIN
0D	YSEL	FA	FA	Y SEL/EDGE CS/Hi L CS
				VERTICAL APERTURE GAIN
1D	CWBR	3D	3D	COLOR W/B COEFF. OF Cr SIGNAL
1E	CWBB	90	90	COLOR W/B COEFF OF Cb SIGNAL
33	CRGP	4A	4A	R-Y POSITIVE GAIN
34	CRGN	50	50	R-Y NEGATIVE GAIN
35	CHYE	0A	0A	R-Y HUE POSITIVE GAIN
36	CHB	10	10	R-Y HUE NEGATIVE GAIN
37	CBGP	30	30	B-Y POSITIVE GAIN
38	CBGN	22	22	B-Y NEGATIVE GAIN
39	CHGR	29	29	B-Y HUE POSITIVE GAIN
57	ROUGP	38	38	OUTDOOR R-Y POSITIVE GAIN
58	ROUGN	2C	2C	OUTDOOR R-Y NEGATIVE GAIN
59	CHOYE	08	08	OUTDOOR R-Y POSITIVE HUE
5A	CHOB	18	18	OUTDOOR R-Y NEGATIVE HUE
5B	BOUGP	38	38	OUTDOOR B-Y POSITIVE GAIN
5C	BOUGN	2A	2A	OUTDOOR B-Y NEGATIVE GAIN
5D	CHOGR	38	38	OUTDOOR B-Y POSITIVE HUE
5E	CHOR	28	28	OUTDOOR B-Y NEGATIVE HUE
73	ECGAN	A0	A0	COLOR GAIN CONTROL
74	ESU	00	00	ECIFI,ECSFCI,LUMINANCE SETUP LEVEL
75	EWC	F0	F0	WHITE CLIP CONTROL
77	EUSC	EB	EB	U(B-Y) SIGNAL BURST LEVEL CONTROL
78	EVSC	16	16	V(R-Y) SIGNAL BURST LEVEL CONTROL
79	CBHN	09	09	B-Y HUE NEGATIVE GAIN
7D	XKCON	06	06	XCK CT,OSIMSE,MMSEL,HSEL,VSEL,SCK CT,UVCK
7E	MDSEL	05	05	SYNC S,EXT DA,C4:2:3,WIDE,LPF SE,PAL,Hi-8, D/Z
89	AETAR	67	67	AE TARGET
8D	AE SPD	40	40	IRIS CLOSE SPEED CONTROL
90	AGCMA	CA	CA	AGC MAXIMUN VALUE
91	CFADR	04	04	CHROMA FADE RATIO OF AGC MAX
92	CFADS	98	98	AGC VALUE OF CHROMA FADE START
93	APNSL	FE	FE	AGC ON APPERTURE NOISE SLICE LEVEL FACTOR
97	BLKST	98	98	EYBLK START POINT(AGC)
98	BLKMA	00	00	EYBLK MAXIMUM VALUE(#74)
9C	R-IN	40	40	W/B R INDOOR CONTROL VALUE
9D	B-IN	90	90	W/B B INDOOR CONTROL VALUE
9E	R-OUT	80	80	W/B R OUTDOOR CONTROL VALUE
9F	B-OUT	65	65	W/B B OUTDOOR CONTROL VALUE
A6	WBTAR	84	84	W/B ADJUST R TARGET
A7	WBTAB	70	70	W/B ADJUST B TARGET:X-20>INPUT HALL=OUTDOOR
E6	MSEL	00	00	SG2=SG,PWR SA,FCM OF,SYN EX,DIS EN/CINEEN

MODE	OSD	DATA1	DATA2	NAME OF ADJUSTMENT
EC	HRGDL	10	10	PCK TO H1/2 DELAY ADJ CTL/H1 TO RG DELAY ADJ CTL
ED	SHP.D	00	00	H1 TO SHP DELAY ADJ CTL/H1 TO SHD DELAY ADJ CTL
EE	ADDL	00	00	H1 TO SPO DELAY ADJ CTL/H1 TO FWCK DELAY ADJ CTL
00		00	00	
01		A9	A9	HALL GAIN CONTROL
06		00	00	AGC CONTROL 2
08		00	00	IRIS CONTROL 2
09		75	75	HALL REFERENCE CONTROL
0A		FF	FF	LENS ADJUST
0B		66	66	V BK NOIS TH,V BK NOISE G,H BK MOIS TH,H BK NOISE G
0E		22	22	APERTURE SLICE CONTROL/APERTURE CLIP
0F		D0	D0	Y H.LIGHT REF VALUE FOR COLOR SUPRESS
10		10	10	EDGE REFERENCE VALUE FOR COLOR WUPRESS
11		02	02	Y SIGNAL GAMMA COEFF. 1
12		07	07	Y SIGNAL GAMMA COEFF. 2
13		10	10	Y SIGNAL GAMMA COEFF. 3
14		30	30	Y SIGNAL GAMMA COEFF. 4
15		55	55	Y SIGNAL GAMMA COEFF. 5
16		85	85	Y SIGNAL GAMMA COEFF. 6
17		C8	C8	Y SIGNAL GAMMA COEFF. 7
18		DB	DB	Y SIGNAL GAMMA COEFF. 8
19		08	08	C SUPR COEFF. DELAY
1A		11	11	Cr/CB/Y SIG,CLPF T,Y S SE,CrMX S,cBMX S
1B		42	42	COLOR MATRIX COEFF. OF Cr SIGNAL
1C		66	66	COLOR MATRIX COEFF. OF Cb SIGNAL
1F		24	24	COLOR W/B COEFF. OF G SIGNAL
20		0C	0C	COLOR DARK SLICE COEFF. OF Cr SIGNAL
21		F4	F4	COLOR DARK SLICE COEFF. OF Cb SIGNAL
22		FB	FB	COLOR DARK SLICE COEFF. OF G SIGNAL
23		02	02	CHROMA GAMMA BENDING POINT1
24		07	07	CHROMA GAMMA BENDING POINT2
25		20	20	CHROMA GAMMA BENDING POINT3
26		30	30	CHROMA GAMMA BENDING POINT4
27		55	55	CHROMA GAMMA BENDING POINT5
28		85	85	CHROMA GAMMA BENDING POINT6
29		C8	C8	CHROMA GAMMA BENDING POINT7
2A		DB	DB	CHROMA GAMMA BENDING POINT8
2B		59	59	Cr(R-G) SIGNAL POSITIVE GAIN
2C		59	59	Cr(R-G) SIGNAL NEGATIVE GAIN
2D		F2	F2	Cr(B-G) SIGNAL POSITIVE GAIN
2E		F2	F2	Cr(B-G) SIGNAL NEGATIVE GAIN
2F		D9	D9	Cb(R-G) SIGNAL POSITIVE GAIN
30		D9	D9	Cb(R-G) SIGNAL NEGATIVE GAIN
31		72	72	Cb(B-G) SIGNAL POSITIVE GAIN
32		72	72	Cb(B-G) SIGNAL NEGATIVE GAIN
3A		40	40	ODM HPF COEFF. A11 FOR AF2
3B		00	00	ODM HPF COEFF. A21 FOR AF2
3C		00	00	ODM HPF COEFF. A22 FOR AF2
3D		7F	7F	ODM HPF COEFF. B10 FOR AF2
3E		00	00	ODM HPF COEFF. B20 FOR AF2
3F		7F	7F	ODM HPF COEFF. B21 FOR AF2
40		00	00	ODM COMMAND
41		00	00	ODM HPF COEFF. A11 FOR AF1

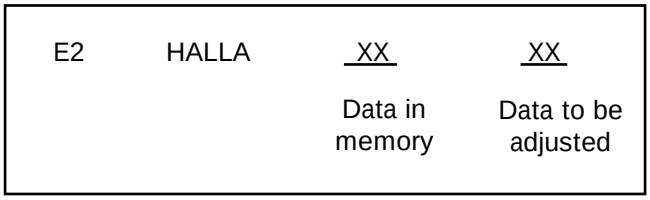
MODE	OSD	DATA1	DATA2	NAME OF ADJUSTMENT
42		00	00	ODM HPF COEFF. A21 FOR AF1
43		00	00	ODM HPF COEFF. A22 FOR AF1
44		60	60	ODM HPF COEFF. B10 FOR AF1
45		C0	C0	ODM HPF COEFF. B20 FOR AF1
46		7F	7F	ODM HPF COEFF. B21 FOR AF1
47		44	44	ODM H START POINT OF WINDOW1 FOR AF
48		B3	B3	ODM H END POINT OF WINDOW1 FOR AF
49		28	28	ODM V START POINT OF WINDOW1 FOR AF
4A		6B	6B	ODM V END POINT OF WINDOW1 FOR AF
4B		E0	E0	ODM AE MODE THRESHOLD VALUE
4C		FF	FF	ODM Y SIG UPPER THRESHOLD VALUE OF AE MODE
4D		00	00	ODM Y SIG LOWER THRESHOLD VALUE OF AE MODE
4E		3F	3F	ODM Y SIG UPPER THRESHOLD VALUE OF AE MODE
4F		00	00	ODM Y SIG LOWER THRESHOLD VALUE OF AE MODE
50		1F	1F	R-Y THRESHOLD VAL OF AWB
51		1F	1F	B-Y THRESHOLD VAL OF AWB
52		3F	3F	(R-Y)+(B-Y) SIG THRE VAL OF AWB
53		0E	0E	H START POINT OF WINDOW2 FOR AF
54		EF	EF	H END POINT OF WINDOW2 FOR AF
55		02	02	V START POINT OF WINDOW2 FOR AF
56		8A	8A	V END POINT OF WINDOW2 FOR AF
5F		35	35	H START POINT OF WINDOW FOR COLOR AUTO ADJ
60		50	50	H STOP POINT OF WINDOW FOR COLOR AUTO ADJ
61		40	40	LENS ADJ TARGET(07H-Aç°07H)
62		A0	A0	INITIAL VALUE OF COLOR GAIN ADJ
63		3A	3A	V START POINT OF WINDOW FOR COLOR AUTO ADJ
64		4B	4B	V STOP POINT OF WINDOW FOR COLOR AUTO ADJ
65		18	18	ZOOM VR THR:#D6+/- #65=ZOOM VR STOP RANGE
66		21	21	V-SUBWINDOW WIDTH OF AE/AWB WINDOW
67		1C	1C	H-SUBWINDOW WIDTH OF AE/AWB WINDOW
68		00	00	
69		00	00	
6A		00	00	
6B		00	00	ODM PEAK HOLD OF AF1 OF WINDOW1
6C		00	00	ODM PEAK HOLD OF AF2 OF WINDOW1
6D		00	00	ODM PEAK HOLD OF AF1 OF WINDOW2
6E		00	00	ODM PEAK HOLD OF AF2 OF WINDOW2
6F		3B	3B	V-SUBWIN. START POINT OF AE/AWB
70		0E	0E	H-SUBWIN. START POINT OF AE/AWB
71		02	02	Nø/Po,ART EFFECT,Y SIG DELAY CTL SELECTION
72		90	90	Y SIGNAL GAIN
76		2A	2A	LUMINANCE BLANK LEVEL
7A		3C	3C	DELAY CONTROL SELECTION
7B		00	00	TEST COMMAD
7C		00	00	TEST MODE COLOR SUPRESS COEFF.
7F		00	00	BURST FLAG DELAY
80		00	00	D/ZOOM AE TARGET CONTROL
81		80	80	HALL REF START VAL FOR HALL AUTO ADJ
82		80	80	HALL GAIN START VAL FOR HALL AUTO ADJ
83		40	40	FILTER1 DATA(40H:X0.5,80H:X1,FFH:X2)
84		B8	B8	AGC AUTO ADJ. MAX START VALUE
85		40	40	R INDOOR START VALUE OF W/B AUTO ADJ
86		98	98	B INDOOR START VALUE OF W/B AUTO ADJ
87		80	80	R OUTDOOR START VALUE OF W/B AUTO ADJ
88		68	68	B OUTDOOR START VALUE OF W/B AUTO ADJ
8A		18	18	AGC AUTO ADJUST MAX TARGET
8B		1B	1B	HALL MIN VALUE
8C		BB	BB	HALL MAX VALUE
8E		10	10	OUTDOOR R CTL DOWN LIMIT RANGE
8F		04	04	OUTDOOR B CTL UP LIMIT RANGE
94		A0	A0	BLC ON AE TARGET

MODE	OSD	DATA1	DATA2	NAME OF ADJUSTMENT
95		20	20	HIGH LUMINANCE HALL TARGET
96		00	00	W/B AUTO ADJ
99		40	40	NOT USED
9A		20	20	P.AE(SPOTLIGHT MODE) IRIS REF +/- VALUE
9B		00	00	NOT USED
A0		88	88	W/B R OUTDOOR UP MARGIN
A1		83	83	W/B R INDOOR DOWN MARGIN
A2		06	06	W/B B INDOOR UP MARGIN
A3		93	93	W/B B OUTDOOR DOWN MARGIN
A4		00	00	W/B INITIAL R OUTDOOR START VALUE
A5		88	88	W/B INITIAL B OUTDOOR START VALUE
A8		80	80	W/B TABLE MODE
A9		02	02	W/B SD/3+AEAVR-MAXDETE
AA		55	55	WB CONTROL BOUNDARY
AB		90	90	W/B CTL STOP HALL OF MACRO AREA
AC		40	40	W/B OUTDOOR STOP HALL
AD		00	00	R,B CTL SPEED UP/DOWN
AE		70	70	W/B RESTART HALL<20H, >40H
AF		10	10	W/B P.AE MODE STOP HALL
B0		10	10	W/B STABLE THRESHOLD
B1		CE	CE	LENS ADJ. FOCUS RESET POSITION L
B2		11	11	LENS ADJ. FOCUS RESET POSITION H
B3		40	40	LENS ZOOM RESET POSITION L
B4		12	12	LENS ZOOM RESET POSITION H
B5		83	83	LENS ADJ. ZOOM RESET DIFFERENCE
B6		37	37	WIDE MODE V.ZOOM RATIO
B7		90	90	AREA1 FILTER1 NOISE LEVEL L
B8		00	00	AREA1 FILTER1 NOISE LEVEL H
B9		D0	D0	AREA2 FILTER1 NOISE LEVEL L
BA		02	02	AREA2 FILTER1 NOISE LEVEL H
BB		70	70	AREA1 FILTER2 NOISE LEVEL L
BC		00	00	AREA1 FILTER2 NOISE LEVEL H
BD		20	20	AREA2 FILTER2 NOISE LEVEL L
BE		02	02	AREA2 FILTER2 NOISE LEVEL H
BF		20	20	IRIS MINIMUM CONTROL:#E0 ADJ RESULT
C0		D0	D0	IRIS MAXIMUM CONTROL:#E0 ADJ RESULT
C1		00	00	V-SUB EVEN CONTROL
C2		77	77	V/H ADJ EVEN/ODD CONTROL
C3		75	75	FOCUS RETURN LOW BYTE
C4		15	15	FOCUS RETURN HIGH BYTE
C5		A0	A0	ZOOM RETURN LOW BYTE
C6		12	12	ZOOM RETURN HIGH BYTE
C7		4E	4E	LENS MARGIN CHECK : PCB
C8		5F	5F	LENS MARGIN CHECK : MAIN
C9		78	78	R VALUE OF YELLOW MODE:#C9=#20(CDSR)
CA		00	00	B VALUE OF YELLOW MODE:#CA=#21(CDSB)
CB		60	60	G VALUE OF YELLOW MODE:#CB=#22(CDSG)
CC		08	08	HALL ADJUST MIN VALUE
CD		64	64	HALL ADJUST CENTER VALUE
CE		C0	C0	HALL ADJUST MAX VALUE
CF		FF	FF	NOT USED
D0		FF	FF	LENS AUTO CHECK
D1		FF	FF	HALL AUTO CHECK(#DB:CHECK MARGIN)
D2		FF	FF	AGC AUTO CHECK
D3		FF	FF	LENS CHECK OF PCB LINE
D4		FF	FF	EIS CHECK(H)
D5		FF	FF	EIS CHECK(L)
D7		FF	FF	ZOOM,FOCUS MOVE
D8		FF	FF	MAIN LINE LENS CHECK
D9		FF	FF	COLOR GAIN AUTO ADJUST
DA		18	18	SETUP MINUS VALUE(#E5):#02(18H)-#DA=#02

MODE	OSD	DATA1	DATA2	NAME OF ADJUSTMENT
DB		08	08	HALL CHECK(#D1) THRESHOULD
DC		82	82	COLOR ADJUST(#D1) TARGET VALUE
DD		FF	FF	
DE		FF	FF	
DF		FF	FF	
E1		FF	FF	AGC AUTO ADJUST
E5		FF	FF	SETUP AUTO ADJUST(#02(18H)-#DA -> #02)
E7		00	00	INVERSE NUMBER OF VERTICAL ZOOM MAGNIFYING RATIO
E8		0C	0C	CCD VERTICAL START POINT BY ZOOM:INTEGER LINES
E9		00	00	CCD VERTICAL START POINT BY ZOOM:SUB-PIXEL
EA		83	83	SHUTTER MODE,LOW SPEED CONTROL,Hi-SHUTT SPD
EB		FF	FF	HIGH SHUTTER SPEED CONTROL
EF		00	00	FOR 680K CCD RG DELAY
F0		80	80	D/Z,EIS,EFFECT,VBLK DELAY AD,LBLK DELAY AD,SCKIV
F1		00	00	H ZOOM STEP.(0~192:X1~X4)
F2		00	00	V ZOOM STEP.(256~64:X1~X4)
F3		00	00	H START READ ADDRESS.(16BIT) H
F4		01	01	H START READ ADDRESS.(16BIT) L
F5		00	00	H ZOOM START SUB PIXEL(0~255)
F6		00	00	V ZOOM START SUB PIXEL(0~255)
F7		00	00	V ZOOM START SUB PIXEL(0~255)
F8		00	00	DVC DELAY
F9		00	00	DSE SELECT
FA		60	60	R VALUE OF SEPIA MODE:#FA=#20
FB		00	00	B VALUE OF SEPIA MODE:#FB=#21
FC		18	18	G VALUE OF SEPIA MODE:#FC=#22
FD		94	94	NEGA MODE TARGET:#75(EWC)=#8F,#71:00 -> 40
FE		98	98	NOISE SLICE START AGC
FF		FF	FF	

Note : On table you see the "XX XX" for DATA 1/DATA 2 "XX XX" means arbitrary value.

<Example of the TV screen>



Initial data by models.

MODE	OSD	NAME OF ADJUSTMENT	DATA1	DATA2	MODELS
7A		DELAY CONTROL SELECTION	3C	3C	VP-A12, VP-A15
			3F	3F	VP-A17, VP-A18
7D		XCK CT,OSIMSE,MMSEL,HSEL,VSEL,SCK CT,UVCK	06	06	VP-A12, VP-A15
			00	00	VP-A17, VP-A18
7E		SYNC C,EXT DA,C4:2:2,WIDE,LPF SE,PAL,Hi8,D/Z	05	05	VP-A12, VP-A15
			07	07	VP-A17, VP-A18
E8		CCD VERTICAL START POINT BY ZOOM:INTERGER LINES	0C	0C	VP-A12, VP-A15
			1B	1B	VP-A17, VP-A18
F0		DZ,EIS,EFFECT,VBLK DELAY AD,LBLK DELAY AD,SCKIV	80	80	VP-A12, VP-A15
			CA	CA	VP-A17, VP-A18
F1		H ZOOM STEP.(0~192:X1~X4)	00	00	VP-A12, VP-A15
			2C	2C	VP-A17, VP-A18
F4		HORIZONTAL START READ ADDRESS(16BIT) L	01	01	VP-A12, VP-A15
			15	15	VP-A17, VP-A18

5-2-2 Camera System Adjustment

Note : From now on, the structure of every adjustment is as follows.

Step	Adjustment Item
1) Mode and input signal/ alignment tape 2) Test point and ADJ. part 3) And after Result and Remarks	

Note : The on-screen display information.
"XX XX" means arbitrary value.
It can be different number depend on the conditions.

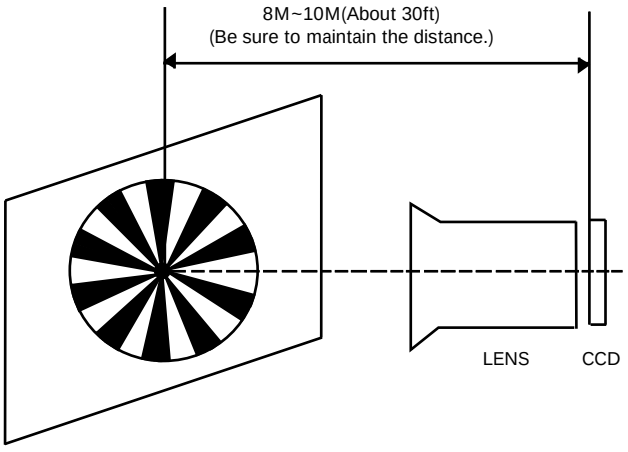
E2	HALLA	XX	XX

1. Focus to zoom tracking

Note : To maintain proper focus throughout the zoom range, the focus lens position must be changed as the zoom lens is moved. During this adjustment the microprocessor will measure the focus positioning requirements at the wide and telephoto position of the zoom lens.

1) Camera "E-E".
2) Focus chart (Attached on the last page of this manual) and EVR.
3) Aim the camera at the focus chart placed about 30ft. (8 to 10 meters) away and perpendicular to the center of the lens.
   The chart should be placed on the flat, gray or white wall.
4) Connect monitor TV jack to video output jack.
5) Press the "STILL (MODE UP)" and "DISPLAY (MODE DOWN)" button, so that the OSD start is "E4 LENSA XX XX".
6) Focus adjustment (There are 2 ways to do the adjustment.)

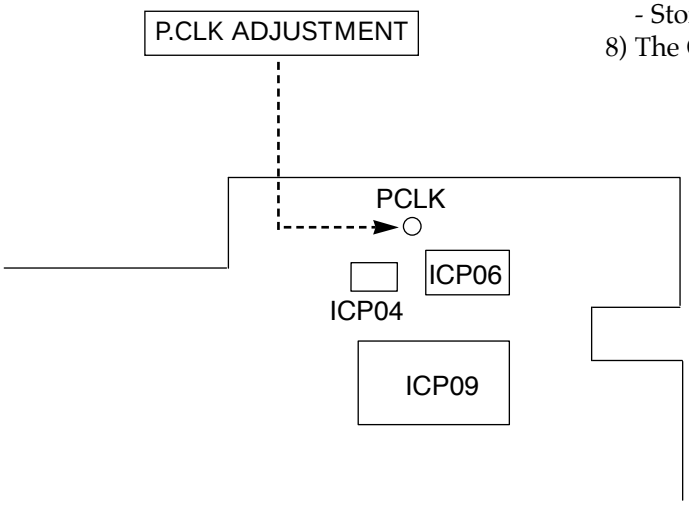
a. Full auto : Press "START/STOP (CONFIRM)" button for full auto adjustment. The camera will move both zoom and focus lens. The adjustment is finished when the O.K! message appears on the TV screen.



b. Manual : Camera lens will be moved to all positions to set maximum focus setting.
b-1. Press the "TELE" button to instruct the microprocessor to adjust the focus lens for optimum focus.
b-2. Press the "START/STOP (CONFIRM)" button. The zoom lens should move to the tele zoom position.
b-3. After the zoom lens reaches the tele zoom position, repeat step b-1.
b-4. Press the "START/STOP (CONFIRM)" button. The zoom lens should move the the middle zoom position.
b-5. After the zoom lens reaches the middle zoom position, if focus state is not the optimum focus state, repeat step b-1, b-2, b-3 and b-4.
b-7. Press "START/STOP (CONFIRM)" button. The zoom lens should move to the wide zoom position, try to step b-1.
b-8. Press "START/STOP (CONFIRM)" button to instruct the microprocessor to write the focus lens positon data to the EEPROM. The lens will move through the zoom range and the picture will fade out and then back in. The OSD will display "OK!".

2. P. CLK Adjustment

1) "Camera", no signal input.
2) P.CLK and EVR.
3) Connent a frequency counter to P.CLK.
4) Press the "STILL (MODE UP)/DISPLAY (MODE DOWN)" button so that the OSD state is "04 P.CLK XX XX".
5) Adjust the "FF(DATA UP)/REW(DATA DOWN)" button so that frequency is
   VP-A12/A15 (9.453125MHz ± 50Hz).
   VP-A17/A18 (14.18750MHz ± 50Hz).



Main PCB (component side)

3. Auto Setup

1) Camera "E-E", 3100°K gray-scale chart.
2) Video(output) jack and EVR.
3) Connect monitor TV to video(output) jack.
4) Press the "STILL (MODE UP)/DISPLAY (MODE DOWN)" button so that the OSD state is "E5 XX XX".
5) Aim the camera at a gray-scale chart evenly illuminated at 1500 to 2000 lx. (Must be 40us.)
6) Press "START/STOP (CONFIRM)" button.
7) Then, the microprocessor will work ;
   - IRIS clocse, setup level, egual to 40mV
   - Store the data to mode 02.
8) The OSD shows "OK!".

4. Zoom VR Center

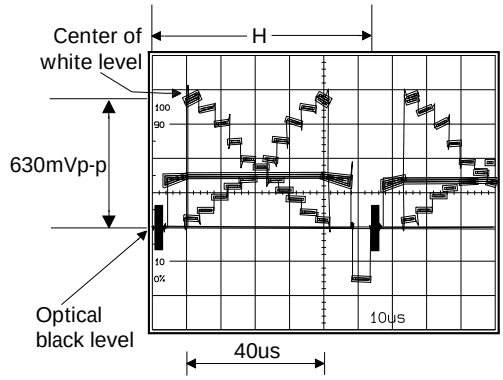
1) Camera "E-E", 3100°K gray-scale chart.
2) Video(output) jack and EVR.
3) Connect monitor TV to video(output) jack.
4) Press the "STILL (MODE UP)/DISPLAY (MODE DOWN)" button so that the OSD state is "D6 Z, CHK XX XX".
5) Aim the camera at a gray-scale chart evenly illuminated at 1500 to 2000 lx. (Must be 40us.)
6) Press "START/STOP (CONFIRM)" button.
7) Then, the microprocessor will work ;
   - Find the zoom VR center position.
   - Store the data to mode D6.

5. Auto hall

1) Camera "E-E", 3100°K gray-scale chart.
2) Video(output) jack and EVR.
3) Connect monitor TV to video(output) jack.
4) Press the "STILL (MODE UP)/DISPLAY (MODE DOWN)" button so that the OSD state is "E2 HALLA XX XX".
5) Aim the camera at a gray-scale chart evenly illuminated at 1500 to 2000 lx. (Must be 40us.)
6) Press "START/STOP (CONFIRM)" button.
7) Then, the microprocessor will work ;
   - IRIS open, HALL maximum value found,
   - IRIS closed, HALL minimum value found,
   - IRIS open, HALL maximum value found,
   - Store the data to mode 09 and mode 01.

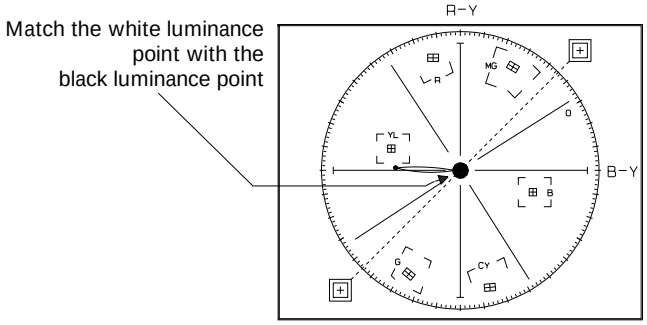
6. Auto IRIS

1) Camera “E-E”, 3100°K gray-scale chart.
2) Video(output) jack and EVR.
3) Connect video(output) jack to waveform monitor input jack and monitor TV jack respectively.
4) Press the “STILL (MODE UP)/DISPLAY (MODE DOWN)” button so that the OSD state is “E0 IRISA XX XX”.
5) Aim the camera at a gray-scale chart evenly illuminated at 1500 to 2000 lx. (Must be 40us.)
6) Press the “START/STOP (CONFIRM)” button.
7) Thenthe micro process will work;
   - IRIS open, IRIS control minimum value found.
   - IRIS close, IRIS control maximum value found.
   - Store the data to mode BF and mode C0.
8) The OSD shows “O.K”.



8. Pre white balance (I)

1) Camera “E-E”, 3100°K gray-scale chart.
2) Video(output) jack and EVR.
3) Connect vectorscope input jack to video(output) jack.
4) Press the “STILL (MODE UP)/DISPLAY (MODE DOWN)” button so that the OSD state is “1D CWBR XX XX”.
5) Aim the camera at a color bar chart illuminated at 1500 to 2000 lx.
6) Adjust the “FF (DATA UP)/REW (DATA DOWN)” button so that the white vector moves to the B-Y axial on screen of the vectorscope.
7) The OSD shows “OK!”.

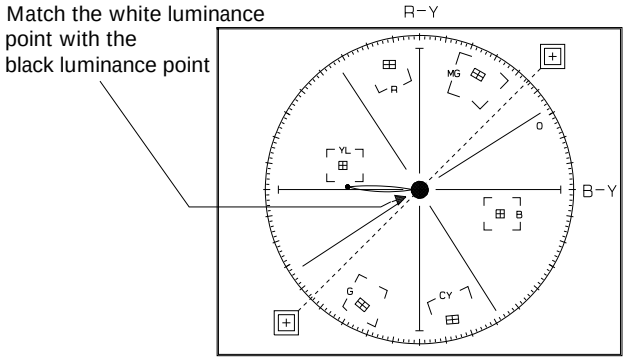


7. Auto white balance

1) Camera “E-E”, 3100°K/5100°K gray-scale chart.
2) Video(output) jack and EVR.
4) Connect vectorscope input jack to video(output) jack.
3) Press the “STILL (MODE UP)/DISPLAY (MODE DOWN)” button so that the OSD state is “E3 WBA XX XX”.

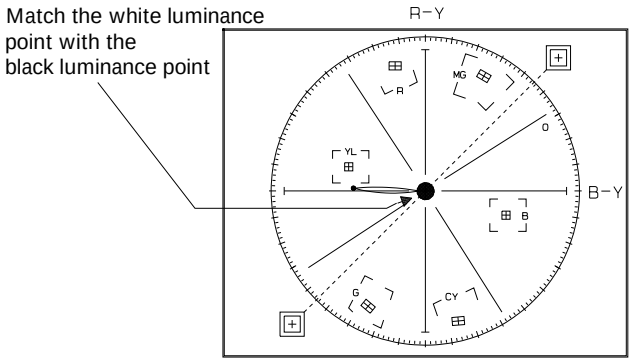
a. W/B Indoor
a-1. Aim the camera at a 3100°K gray-scale chart illuminated at 1500 to 2000 lx. (40us)
a-2. Press “START/STOP (CONFIRM)” button so that the white vector moves to the center on screen of the vectorscope.
a-3. The OSD shows “OK!”.

b. W/B Outdoor
b-1. Aim the camera at a 5100°K gray-scale chart illuminated at 1500 to 2000 lx. (40us)
b-2. Press “START/STOP (CONFIRM)” button so that the white vector moves to the center on screen of the vectorscope.
b-3. The OSD shows “OK!”.



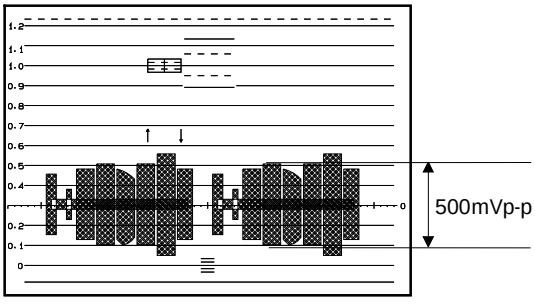
9. Pre white balance (II)

1) Camera "E-E", 3100°K gray-scale chart.
2) Video(output) jack and EVR.
4) Connect vectorscope input jack to video(output) jack.
3) Press the "STILL (MODE UP)/DISPLAY (MODE DOWN)" button so that the OSD state is "1E CWBB XX XX".
5) Aim the camera at a color bar chart illuminated at 1500 to 2000 lx.
6) Adjust the "FF (DATA UP)/REW (DATA DOWN)" button so that the white vector moves to the R-Y axial on screen of the vectorscope.
7) The OSD shows "OK!".



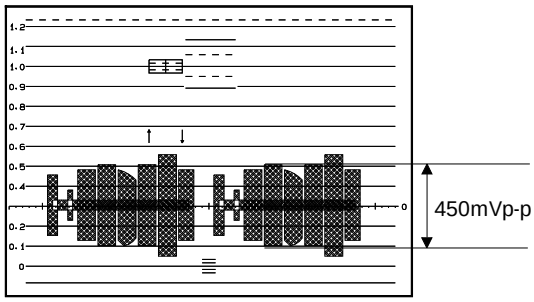
10. R-Y Positive Gain

1) Camera "E-E", 3100°K color bar chart.
2) Video(output) jack and register of EEPROM.
3) Connect video(output) jack to waveform monitor input jack and monitor TV jack respectively.
4) Press the "STILL (MODE UP)/DISPLAY (MODE DOWN)" button so that the OSD state is "33 CRGP XX XX".
5) Aim the camera at a color bar chart illuminated at 1500 to 2000 lx.
6) Adjust the "FF (DATA UP)/REW (DATA DOWN)" button so that the red level is 500mVp-p ± 50mV.
7) Be sure to press the "START/STOP (CONFIRM)" button to memorize setting.
8) The OSD shows "OK!".



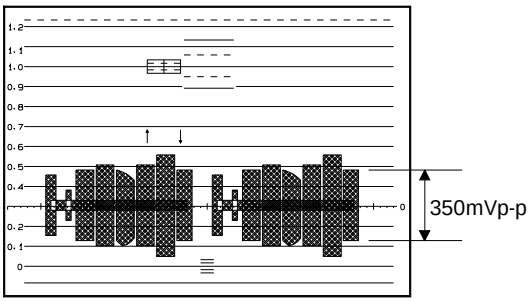
11. R-Y Negative Gain

1) Camera "E-E", 3100°K color bar chart.
2) Video(output) jack and register of EEPROM.
3) Connect video(output) jack to waveform monitor input jack and monitor TV jack respectively.
4) Press the "STILL (MODE UP)/DISPLAY (MODE DOWN)" button so that the OSD state is "34 CRGN XX XX".
5) Aim the camera at a color bar chart illuminated at 1500 to 2000 lx.
6) Adjust the "FF (DATA UP)/REW (DATA DOWN)" button so that the cyan level is 450mVp-p.
7) Be sure to press the "START/STOP (CONFIRM)" button to memorize setting.
8) The OSD shows "OK!".



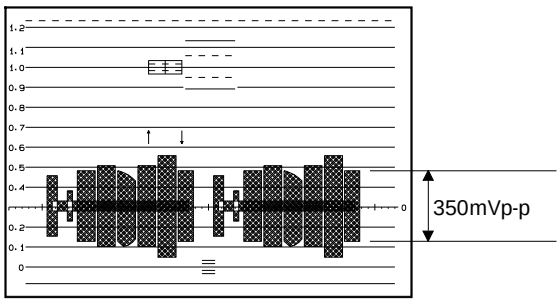
12. B-Y Positive Gain

1) Camera "E-E", 3100°K color bar chart.
2) Video(output) jack and register of EEPROM.
3) Connect video(output) jack to waveform monitor input jack and monitor TV jack respectively.
4) Press the "STILL (MODE UP)/DISPLAY (MODE DOWN)" button so that the OSD state is "37 CBGP XX XX".
5) Aim the camera at a color bar chart illuminated at 1500 to 2000 lx.
6) Adjust the "FF (DATA UP)/REW (DATA DOWN)" button so that the blue level is 350mVp-p ± 50mV.
7) Be sure to press the "START/STOP (CONFIRM)" button to memorize setting.
8) The OSD shows "OK!".



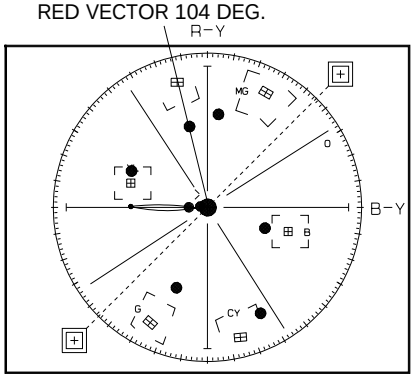
13. B-Y Negative Gain

1) Camera “E-E”, 3100°K color bar chart.
2) Video(output) jack and register of EEPROM.
3) Connect video(output) jack to waveform monitor input jack and monitor TV jack respectively.
4) Press the “STILL (MODE UP)/DISPLAY (MODE DOWN)” button so that the OSD state is “38 CBGN XX XX”.
5) Aim the camera at a color bar chart illuminated at 1500 to 2000 lx.
6) Adjust the “FF (DATA UP)/REW (DATA DOWN)” button so that the yellow level is 350mV.
7) Be sure to press the “START/STOP (CONFIRM)” button to memorize setting.
8) The OSD shows “OK!”.



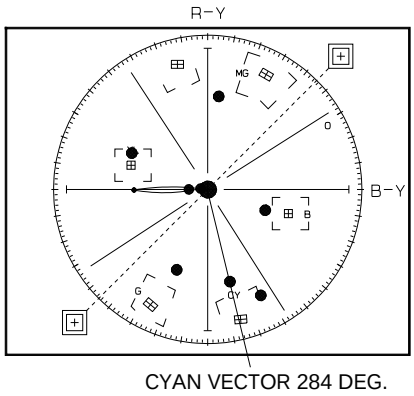
14. R-Y Positive Hue

1) Camera “E-E”, 3100°K color bar chart.
2) Video(output) jack and register of EEPROM.
3) Connect video(output) jack to vectorscope input jack and monitor TV jack respectively.
4) Press the “STILL (MODE UP)/DISPLAY (MODE DOWN)” button so that the OSD state is “79 CBHN XX XX”.
5) Aim the camera at a color bar chart illuminated at 1500 to 2000 lx.
6) Adjust the “FF (DATA UP)/REW (DATA DOWN)” button so that the red vector is 104.
7) Be sure to press the “START/STOP (CONFIRM)” button to memorize setting.
8) The OSD shows “OK!”.



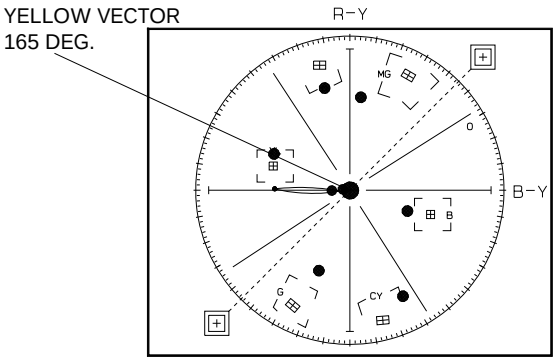
15. R-Y Negative Hue

1) Camera “E-E”, 3100°K color bar chart.
2) Video(output) jack and register of EEPROM.
3) Connect video(output) jack to vectorscope input jack and monitor TV jack respectively.
4) Press the “STILL (MODE UP)/DISPLAY (MODE DOWN)” button so that the OSD state is “39 CHGR XX XX”.
5) Aim the camera at a color bar chart illuminated at 1500 to 2000 lx.
6) Adjust the “FF (DATA UP)/REW (DATA DOWN)” button so that the cyan vector is 284.
7) Be sure to press the “START/STOP (CONFIRM)” button to memorize setting.
8) The OSD shows “OK!”.



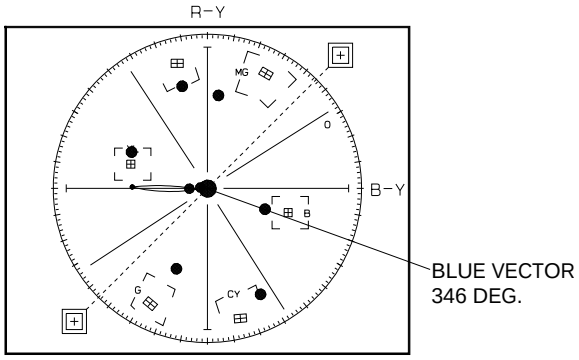
16. B-Y Negative Hue

1) Camera “E-E”, 3100°K color bar chart.
2) Video(output) jack and register of EEPROM.
3) Connect video(output) jack to vectorscope input jack and monitor TV jack respectively.
4) Press the “STILL (MODE UP)/DISPLAY (MODE DOWN)” button so that the OSD state is “35 CHYE XX XX”.
5) Aim the camera at a color bar chart illuminated at 1500 to 2000 lx.
6) Adjust the “FF (DATA UP)/REW (DATA DOWN)” button so that the yellow vector is 165.
7) Be sure to press the “START/STOP (CONFIRM)” button to memorize setting.
8) The OSD shows “OK!”.



17. B-Y Positive Hue

1) Camera “E-E”, 3100°K color bar chart.
2) Video(output) jack and register of EEPROM.
3) Connect video(output) jack to vectorscope input jack and monitor TV jack respectively.
4) Press the “STILL (MODE UP)/DISPLAY (MODE DOWN)” button so that the OSD state is “36 CHB XX XX”.
5) Aim the camera at a color bar chart illuminated at 1500 to 2000 lx.
6) Adjust the “FF (DATA UP)/REW (DATA DOWN)” button so that the blue vector is 346.
7) Be sure to press the “START/STOP (CONFIRM)” button to memorize setting.
8) The OSD shows “OK!”.



5-2-3 EVF Adjustment

Note : From this point forward, the structure of every adjustment is as follows.

Step	Adjustment Item
1. Mode and input signal/ alignment tape 2. Test point and ADJ. part 3. Result and Remarks	ADJ. point → Test point ⇢

1. AFC

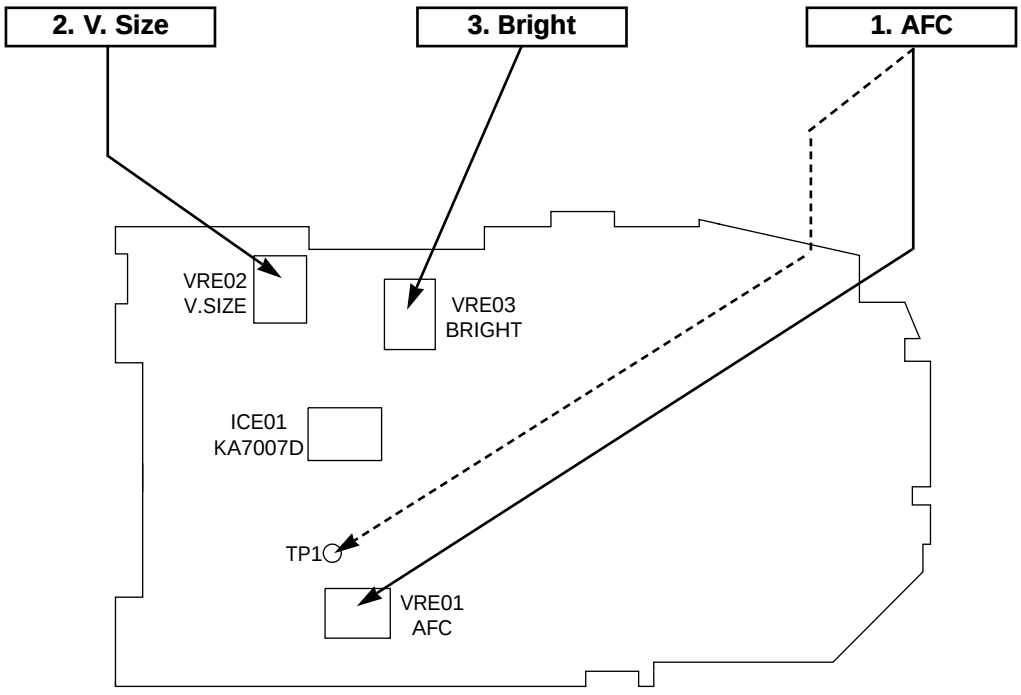
1) VCR "PB", Alignment tape (Lion pattern).
2) TP1 and VRE01.
3) Connect digital voltmeter probe to TP1.
4) Adjust VRE01 so that the voltage is DC 2.5V ± 0.1V.

2. V. Size

1) VCR "PB", Alignment tape (Lion pattern).
2) Viewfinder and VRE02.
3) Adjust VRE02 so that the counter circle on the lion pattern is perfect by round.

3. Bright

1) VCR "PB", Alignment tape (Lion pattern).
2) Viewfinder and VRE03.
3) Adjust the VRE03 so that the 3rd and 4th steps of the lion pattern can be distinguished.



EVF PCB (Component side)

5-2-4 CVF Adjustment

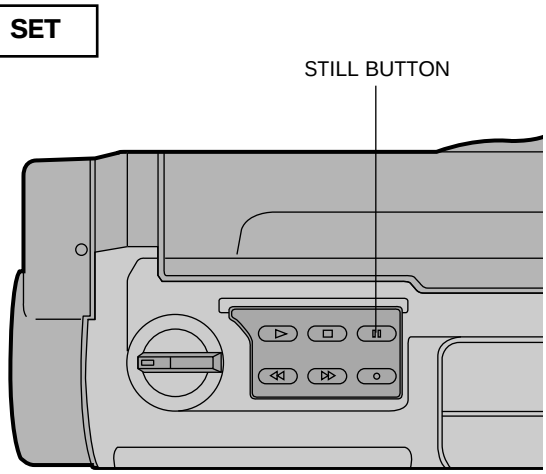
5-2-4 (a) PREPARATION

Note 1 : EVR built-in EEPROM is used for CVF adjustment.

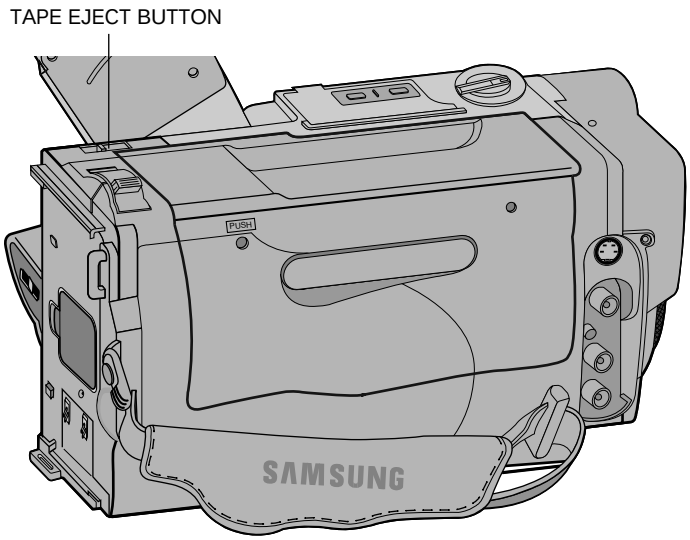
1. How to select the CVF adjust mode.

1) Connect the power source and then set the power conversion switch to VCR mode.
2) Press the "STILL" and push the "TAPE EJECT" button on the unit towards arrow for more than about 3 seconds to set to the adjust mode.

SET



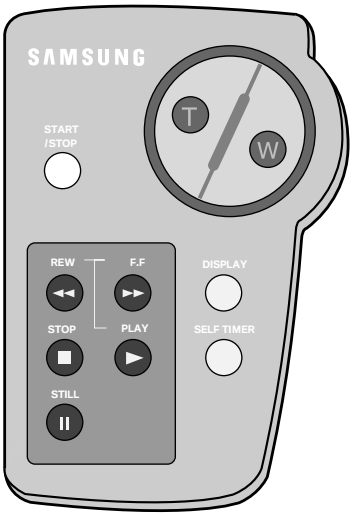
(TOP VIEW)



(RIGHT VIEW)

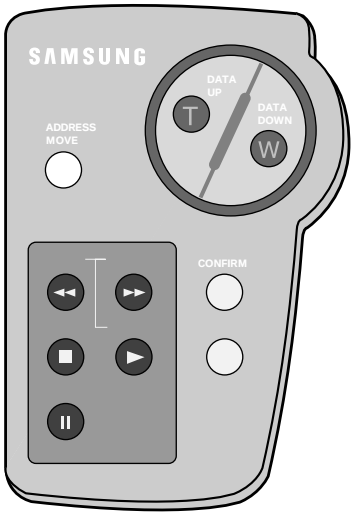
REMOTE CONTROL

Remote for camcorder
adjust for jig (Part No. : AD59-10379A).



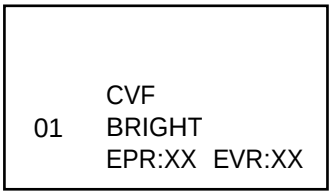
Reassignment is the
adjustment mode.

Button placement when remote is
used for service adjustment.



Note : In service adjustment mode, button names are different from those in customer CVF function control mode. EX) "DISPLAY" button is the same as "CONFIRM".

3) If CVF is set to the adjust mode, the OSD shows as follows.



Address move → "START/STOP" button on the Remote control.
Data up/Data down → "TELE/WIDE" button on the Remote control.
Confirm → "DISPLAY" button on the Remote control.

Ex) 01 → BRIGHT → EPR:XX → EVR:XX

ADDRESS	MODE	EPR	EVR	MEAN	REAMRK
01	BRIGHT	XX	XX	BRIGHT	ADJUST
02	COLOR	XX	XX	COLOR GAIN	ADJUST
03	HUE	XX	XX	HUE	ADJUST
04	R BRT	XX	XX	R SUB BRIGHT	ADJUST
05	B BRT	XX	XX	B SUB BRIGHT	ADJUST
06	RPD	XX	XX	PLL	ADJUST
07	GAMMA	75	75	GAMMA GAIN	FIXED
08	CONTRAST	55	55	CONTRAST	FIXED

4) After finishing the adjustment, reset the main power source (OFF-ON) to memorize the adjustment data in EEPROM.

5-2-4 (b) ADJUSTMENT

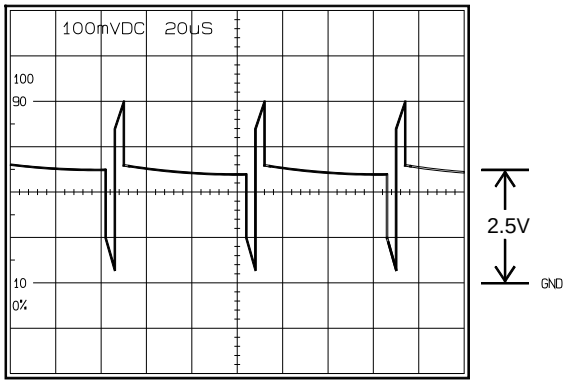
Note : 1. From this point forward, the structure of every adjustment is as follows.
2. See page 5-16 for the location of test points and adjustments.

Step	Adjustment Item
1. Mode and input signal/ alignment tape 2. Test point and ADJ. part 3. Result and Remarks	

ADJ. point
Test point

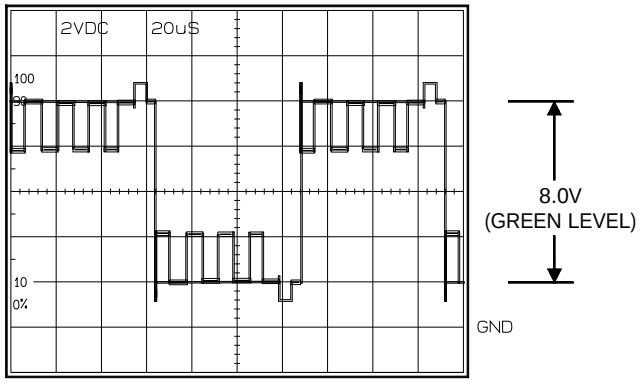
1. RPD

1) VCR "PB", Color bar (SP).
2) RPD and EVR.
3) Connect digital voltmeter probe to RPD.
4) Press the "START/STOP (MODE UP)" button so that the OSD state is "06 RPD EPR:XX EVR:XX".
5) Adjust the "TELE (DATA UP)/WIDE (DATA DOWN)" button so that RPD level is 2.6 ± 0.1V DC.
6) Be sure to press the "DISPLAY(CONFIRM)" button to memorize setting.
7) The OSD shows "CONFIRM !".



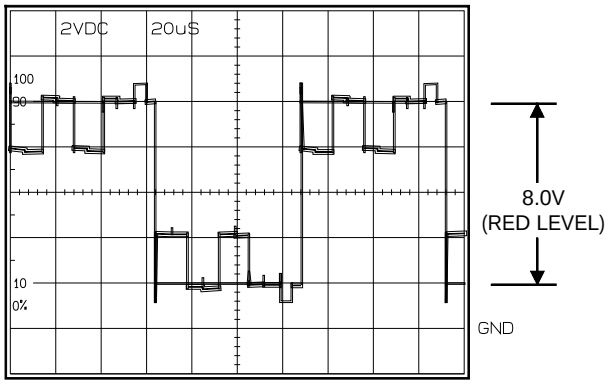
2. Brightness

1) VCR "PB", Color bar (SP).
2) G-OUT and EVR.
3) Connect an oscilloscope probe to G-OUT.
4) Press the "START/STOP (MODE UP)" button so that the OSD state is "01 BRIGHT EPR:XX EVR:XX".
5) Adjust the "TELE (DATA UP)/WIDE (DATA DOWN)" button so that bright level is 8.0Vp-p.
6) Be sure to press the "DISPLAY(CONFIRM)" button to memorize setting.
7) The OSD shows "CONFIRM !".



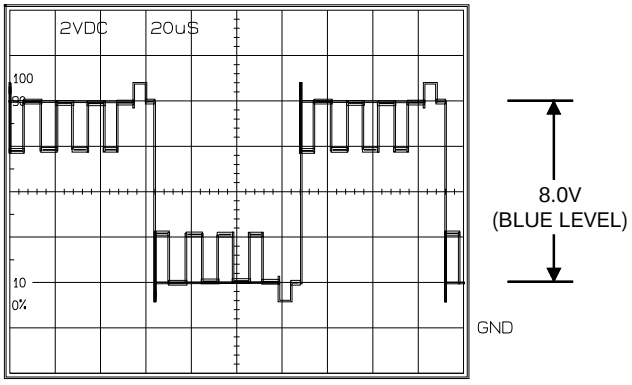
3. R-Sub Brighness

1) VCR "PB", Color bar (SP).
2) R-OUT and EVR.
3) Connect an oscilloscope probe to R-OUT.
4) Press the "START/STOP (MODE UP)" button so that the OSD state is "04 R BRT EPR:XX EVR:XX".
5) Adjust the "TELE (DATA UP)/WIDE (DATA DOWN)" button so that R-OUT level is 8.0Vp-p.
6) Be sure to press the "DISPLAY(CONFIRM)" button to memorize setting.
7) The OSD shows "CONFIRM !".



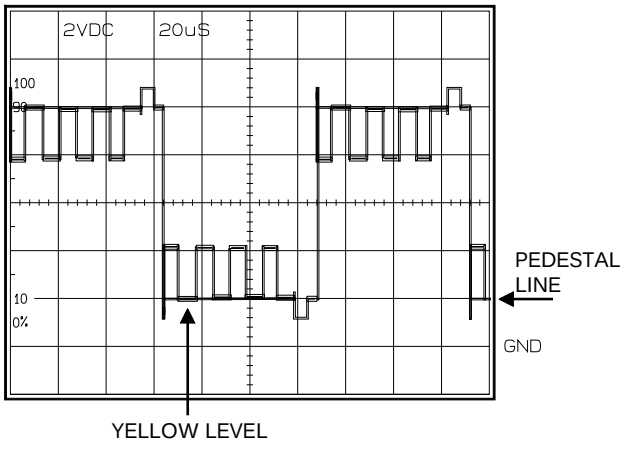
4. B-Sub Brightness

1) VCR “PB”, Color bar (SP).
2) B-OUT and EVR.
3) Connect an oscilloscope probe to B-OUT.
4) Press the “START/STOP (MODE UP)” button so that the OSD state is “05 B BRT EPR:XX EVR:XX”.
5) Adjust the “TELE (DATA UP)/WIDE (DATA DOWN)” button so that ROUT level is 8.0Vp-p.
6) Be sure to press the “DISPLAY(CONFIRM)” button to memorize setting.
7) The OSD shows “CONFIRM !”.



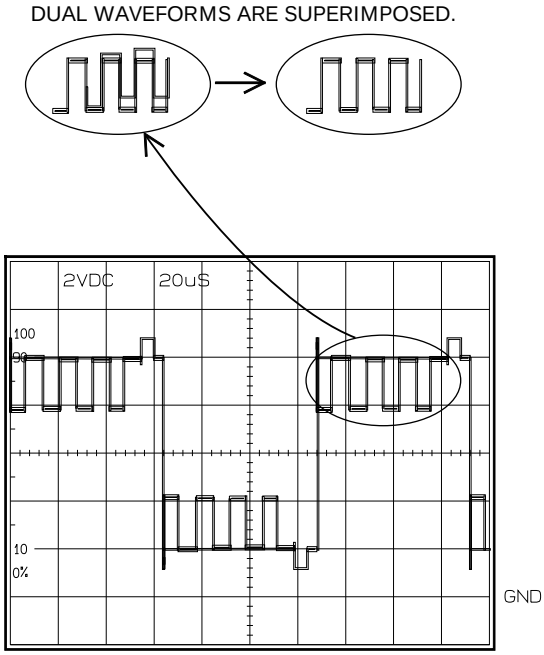
5. Color

1) VCR “PB”, Color bar (SP).
2) B-OUT and EVR.
3) Connect an oscilloscope probe to B-OUT.
4) Press the “START/STOP (MODE UP)” button so that the OSD state is “02 COLOR EPR:XX EVR:XX”.
5) Adjust the “TELE (DATA UP)/WIDE (DATA DOWN)” button so that the yellow level is equal to the pedestal line.
6) Be sure to press the “DISPLAY(CONFIRM)” button to memorize setting.
7) The OSD shows “CONFIRM !”.



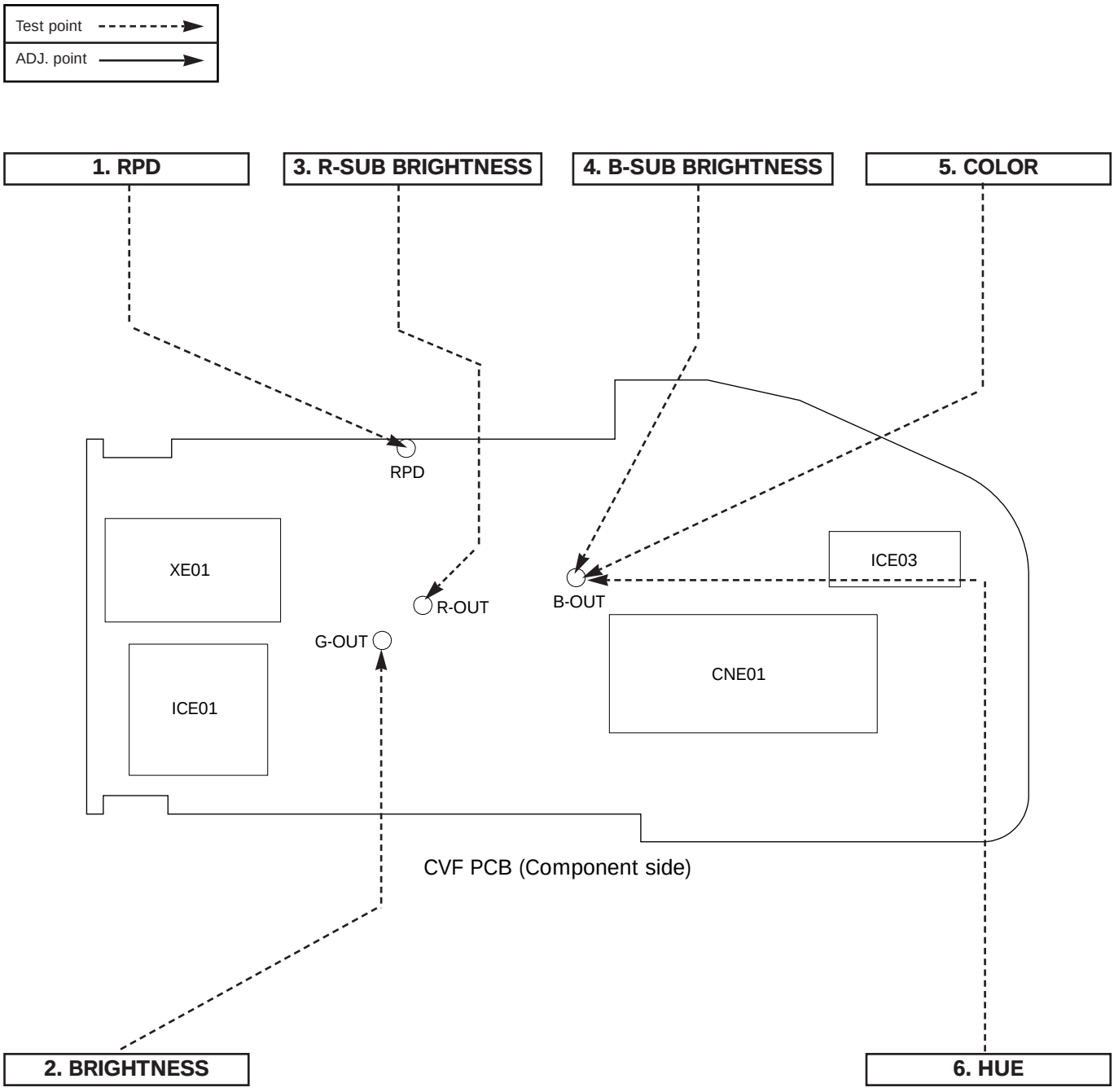
6. HUE

1) VCR “PB”, Color bar (SP).
2) B-OUT and EVR.
3) Connect an oscilloscope probe to B-OUT.
4) Press the “START/STOP (MODE UP)” button so that the OSD state is “03 HUE EPRP:XX EVR:XX”.
5) Adjust the “TELE (DATA UP)/WIDE (DATA DOWN)” button so that the dual waveforms are superimposed.
6) Be sure to press the “DISPLAY(CONFIRM)” button to memorize setting.
7) The OSD shows “CONFIRM !”.



◆ Test point and adjustment points :

NO	ADDRESS	Adjustment name	Test point	Adjustment point	Spec.
1	06	RPD	RPD	EVR	2.6 ± 0.1V DC
2	01	BRIGHTNESS	G-OUT	EVR	8.0Vp-p
3	04	R-SUB BRIGHTNESS	R-OUT	EVR	8.0Vp-p
4	05	B-SUB BRIGHTNESS	B-OUT	EVR	8.0Vp-p
5	02	COLOR	B-OUT	EVR	-
6	03	HUE	B-OUT	EVR	-
7	07	GAMMA	-	EVR Data Fixed	75
8	08	CONTRAST	-	EVR Data Fixed	55



5-3 VCR Section Adjustment

5-3-1 Preparations

1. Equipment :

1) Monitor TV.
2) Dual trace oscilloscope of over 20MHz band, incorporates delay mode.
   (Use 10 : 1 probe unless otherwise specified.)
3) Frequency counter
4) Pattern generator with video output terminal.
5) Digital voltmeter.
6) DC power supply.
7) Alignment tape (Color bar : SP)

2. Composition of VCR PCBoards

1) Main PCB (system control/servo, video, camera)
2) Audio PCB
3) DC/DC converter PCB
4) A/V jack ass'y
5) Function-DSE PCB
6) Function-VCR PCB
7) Function-BLC PCB
8) Function-EAP PCB

3. Set-up during adjustment
   Since the video output signal obtained from the pattern generator is used as the adjusting signal for the VCR block, it is necessary that this video output signal be within the required specifications. Connect an oscilloscope to video input jack and make sure that the amplitude of the video SYNC signal is approximately 0.3V, that the video block amplitude is approximately 0.7V, that the burst signal amplitudeis approximately 0.3V with fiat characterics, and the signal level ratio between the burst signal and "Red" signal is 0.30 : 0.66.
   The video signal (color bars) used for VCR block electrical adjustment are shown in figure 1.

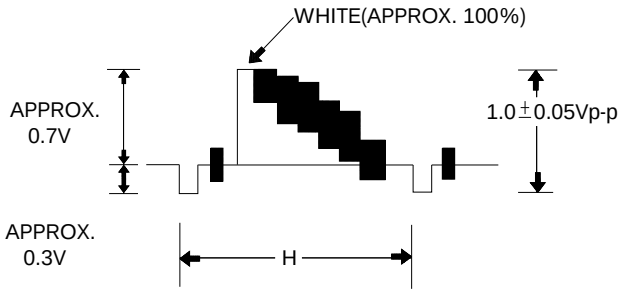


Fig. 1 Color bar signal pattern generator

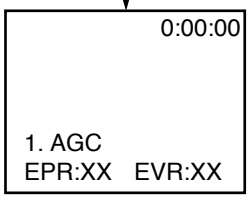
4. How to get into srvice "**ADJUST**" mode

STEP 1

1. Connect the power source (battery/DC cable).
2. Set the knob-power of the camcorder to VCR position.
3. Press the "TAPE EJECT" button to eject mode.

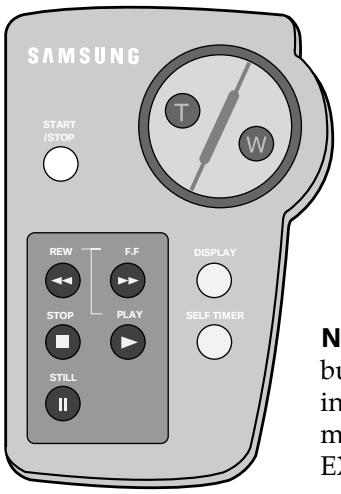
STEP 2

1. Press and hold " ■ (STOP)" button on camcorder and "WIDE" button on remote control at the same time for more than 5 seconds.
2. If OSD Shows like the figure below, VCR adjustment mode has been successfully activated.
3. Insert tape into housing assy and then perform the adjustments.



5. The location of function button.

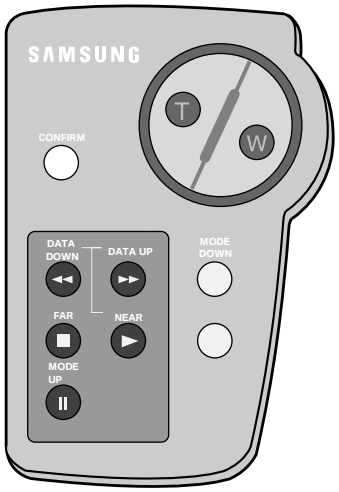
Remote for camcorder
adjust for jig (Part No. : AD59-10379A).



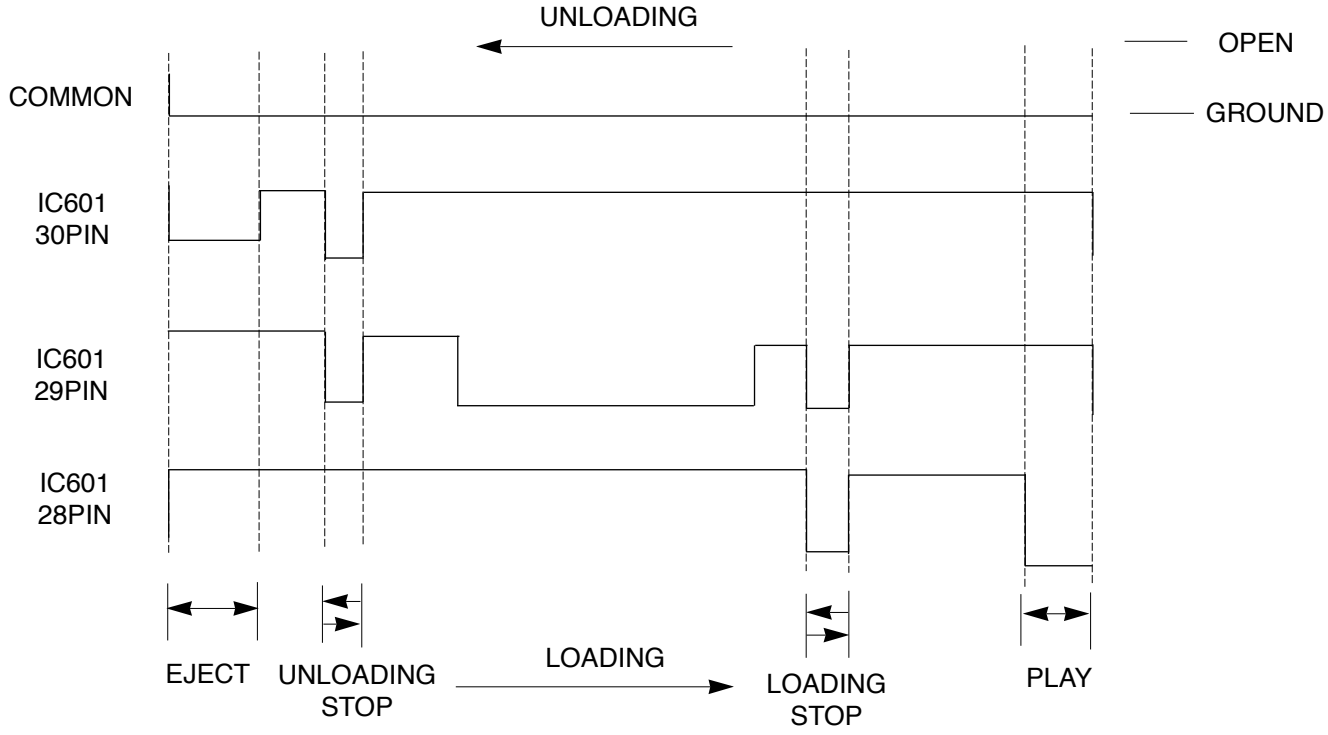
Reassignment is the adjustment mode.

Note : In service adjustment mode, button names are different from those in customer VCR function control mode.
EX: "START/STOP" button is the same as "CONFIRM".

Button placement when remote is used for service adjustment.



5-3-2 Timing Chart of Program SWITCH



POSITION	IC601 30PIN	IC601 29PIN	IC601 28PIN	Action Mode
EJECT	L	H	H	EJECT
UNLOADING STOP	L	L	H	UNLOADING STOP
LOADING STOP	H	L	L	LOADING STOP
PB	H	H	L	PLAY,FF,REW,STILL...

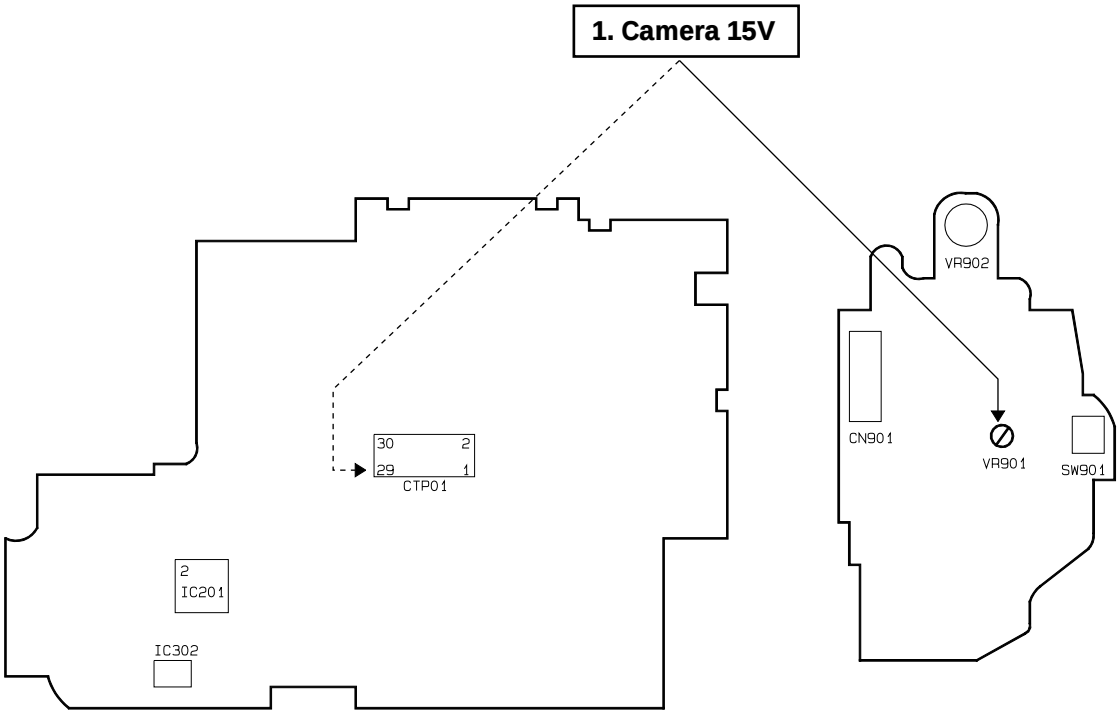
5-3-3 DC/DC Converter Section

Note : From now on, the structure of every adjustment is as follows.

Step	Adjustment Item
1. Mode and input signal/ alignment tape 2. Test point and ADJ. part 3. Result and Remarks	ADJ. point → Test point ⇢

1. Camera 15V

1). Camera, no signal input.
2). Pin 29 of CTP01 and VR901.
3). Set the knob-rotary to the camera mode.
4). Connect digital voltmeter probes to pin 29 of the CTP01.
5). Adjust VR901 so that the digital voltmeter becomes DC15 ± 0.1V.



Main PCB (Comporent side)

DC/DC Converter PCB (Comporent side)

5-3-4 VCR Section

Note 1 : From now on, the structure of every adjustment is as follows.

Step	Adjustment Item
1. Mode and input signal/ alignment tape 2. Test point and ADJ. part 3. Result and Remarks	

ADJ. point
Test point

Note 2 : How to connect video in/out signal

- Connect the video cable to pattern generator and ass'y A/V Jack, so that video in/out signal is adjusted automatically.

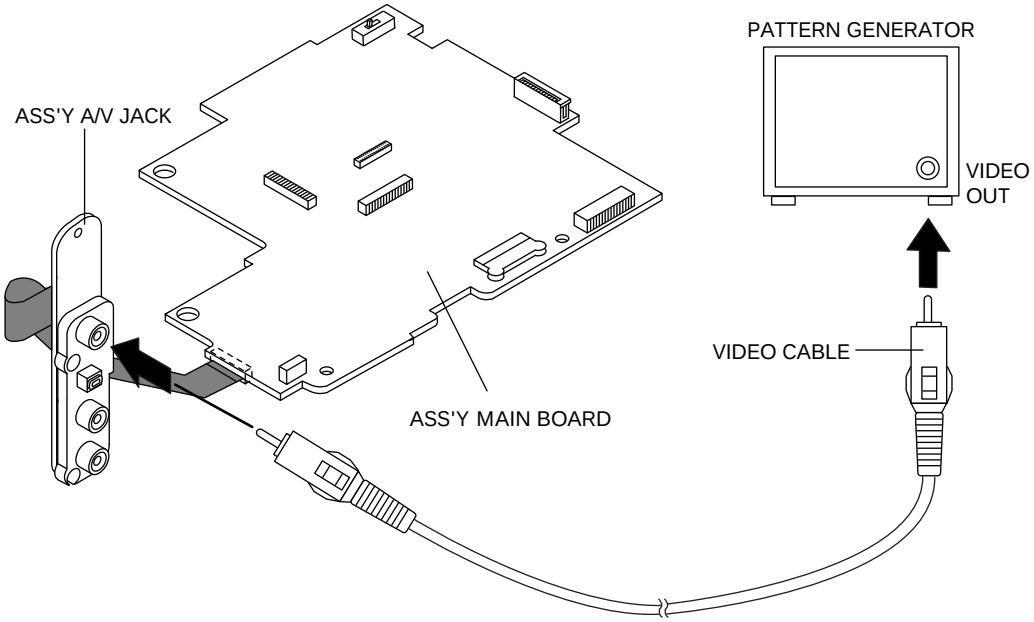


Fig. 2 Video Signal Connection

Note 3 :
How to record - Press the **"CAM-REC "** button on the unit function vcr board of unit at adjustment mode.

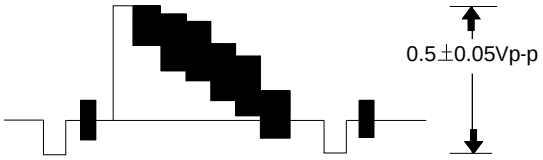
Note 4 : 1. Video block - See page 5-26 for the location of tests points and adjustments.
Audio block - See page 5-28 for the location of tests points and adjustments.
2. Press the "STILL" button of set for mode change.

Note 5 : The OSD information.
"XX" means arbitary values. It can be different number depend on the condition.

1. AGC
EPR:XX EVR:XX

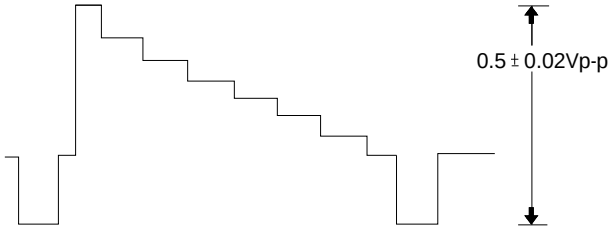
1. AGC (Video block)

1) Rec, 100% color bar signal.
2) TP201 and EVR.
3) Confirm the "1. AGC" mode by pressing the "STILL" (MODE CHANGE) button of remote control.
4) Connect an oscilloscope to TP201.
5) Press the "REW (DATA DOWN)/F.F (DATA UP)" button so that the TP201 is 0.5 ± 0.02Vp-p from SYNC tip to peak level.
6) Be sure to press the "START/STOP (CONFIRM)" button on remote control to memorize setting.



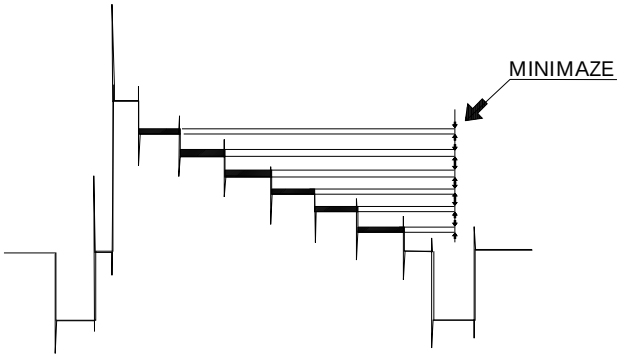
2. Y-EMPHASIS (Video block)

1) Rec, 100% color bar signal.
2) TP202 and EVR.
3) Confirm the "2. Y-EMPHASIS" mode by pressing the "STILL" (MODE CHANGE) button of remote control.
4) Connect an oscilloscope to TP202.
5) Press the "REW (DATA DOWN)/F.F (DATA UP)" button so that the TP202 is 0.5 ± 0.02Vp-p from SYNC tip to peak level.
6) Be sure to Press the "START/STOP (CONFIRM)" button on remote control to memorize setting.



3. Y/C Separation (Video block)

1) Rec, 100% color bar signal.
2) Pin 2 of IC201 and VR301, EVR.
3) Confirm the "3. Y/C SEP" mode by pressing the "STILL" (MODE CHANGE) button of remote control.
4) Connect an oscilloscope to pin 2 of IC201.
5) Adjust VR301 to minimize the residual chroma component.
6) Press the "REW (DATA DOWN)/F.F (DATA UP)" button so that the pin 2 of IC201 minimize the residual chroma component.
7) Adjust VR301 to minimize the residual chroma component.
8) Be sure to Press the "START/STOP (CONFIRM)" button on remote control to memorize setting.



4. CHROMA EMP (Video block)

"4. CHROMA EMP" Adjustment is fixed to EVR data A2.

5. Y-FM Carrier Frequency (Video block)

1) Rec, no signal input
2) TP203 and EVR
3) Confirm the "5. CARRIER" mode by pressing the "STILL" (MODE CHANGE) button of remote control.
4) Connect frequency counter probe to TP203.
5) Press the "REW (DATA DOWN)/F.F (DATA UP)" button so that the TP203 is 4.38 ± 0.02MHz.
6) Be sure to Press the "START/STOP (CONFIRM)" button on remote control to memorize setting.

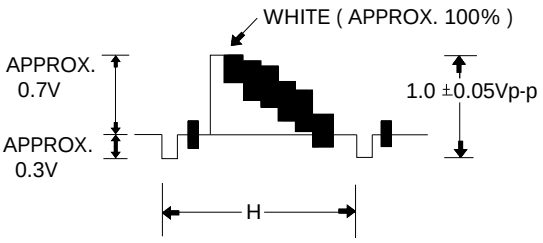
6. Y-FM Deviation (Video block)

Note : Confirm that "Y-FM Carrier Frequency" and "PB Output Level" adjustment have been completed.

1) Rec PB, 100% color bar signal.
2) TP202 and EVR.
3) Record the color bar signal at adjustment mode.
4) Turn power off/on and then playback the recorded signal.
5) Confirm the playback output of pin 24 of CTP01. (Specified value: 1.0 ± 0.05Vp-p)
6) If the specified value is not satisfied, repeat above three steps.

- When larger than specified value : press the "F.F (DATA UP)" and then press the "START/STOP (CONFIRM)" button.

- When smaller than specified value : press the "REW (DATA DOWN)" and then press the "START/STOP (CONFIRM)" button.



7. REC Y Level (Video block)

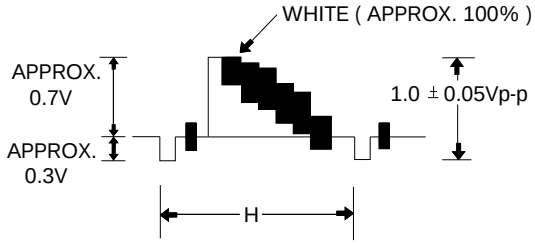
"7. REC Y" Adjustment is fixed to EVR data B3

8. REC C Level (Video block)

"8. REC C" Adjustment is fixed to EVR data A4

9. PB Output Level (Video block)

1) PB, color bar tape.
2) Pin 24 of CTP01 and EVR.
3) Confirm the "9. PB Y" mode by pressing the "STILL" (MODE CHANGE) button of remote control.
4) Connect an oscilloscope to pin 24 of CTP01.
5) Press the "REW (DATA DOWN)/F.F (DATA UP)" button so that the pin 24 of CTP01 is 1.0 ± 0.05Vp-p from SYNC to peak level.
6) Be sure to Press the "START/STOP (CONFIRM)" button on remote control to memorize setting.

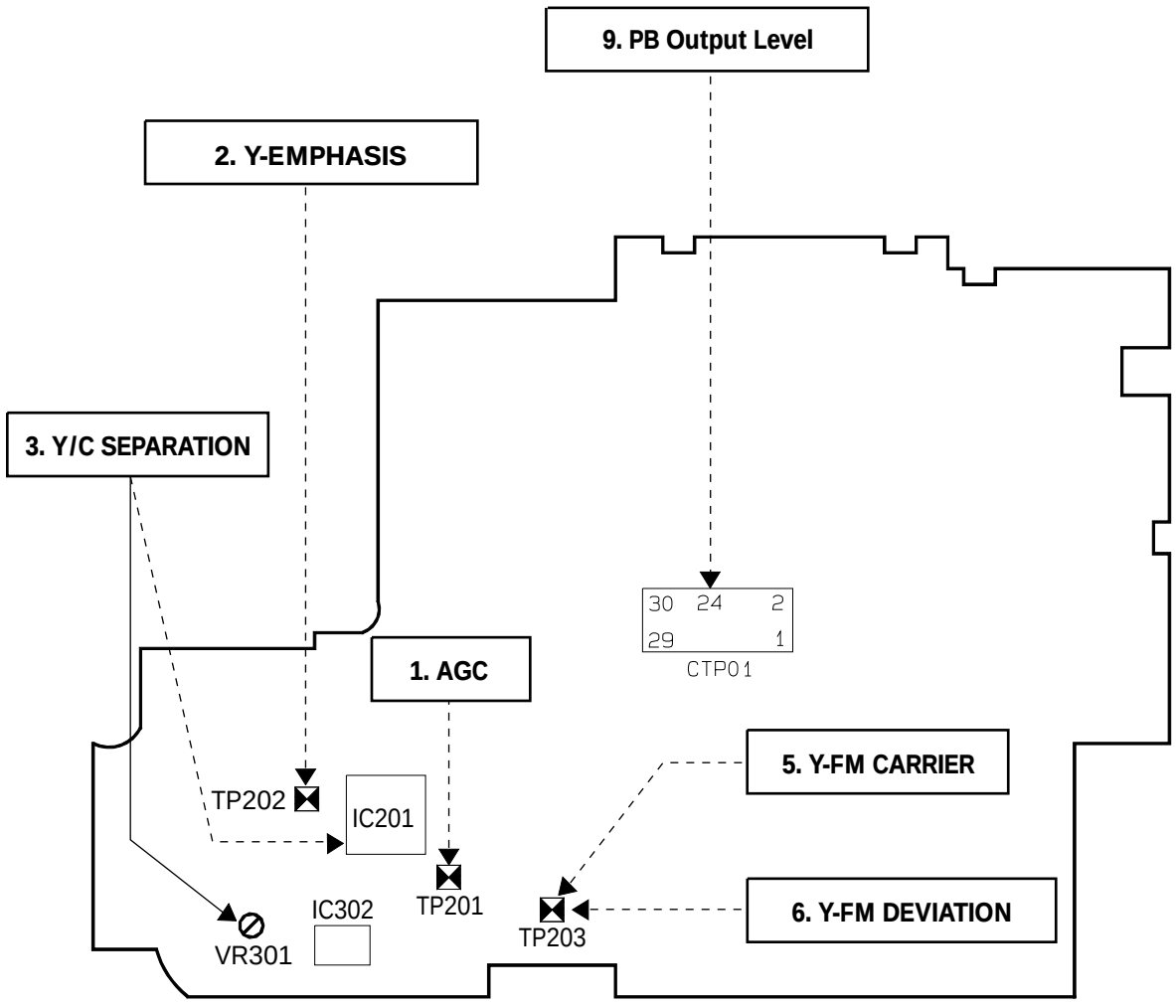


◆ Test point and adjustment points :

NO	Adjustment name	Test point	Adjustment point	Spec.
1	AGC	TP201	EVR	0.5 ± 0.02Vp-p
2	Y-EMPHASIS	TP202	EVR	0.5 ± 0.02Vp-p
3	Y/C SEPARATION	Pin 2 of IC201	VR301, EVR	-
4	CHROMA EMP	-	EVR data fixed	A4
5	Y-FM CARRIER FREQUENCY	TP203	EVR	4.38 ± 0.02MHz
6	Y-FM DEVIATION	TP202	EVR	1.0 ± 0.05Vp-p
7	REC Y LEVEL	-	EVR data fixed	B3
8	REC C LEVEL	-	EVR data fixed	A4
9	PB OUTPUT LEVEL	Pin 24 of CTP01	EVR	1.0 ± 0.05Vp-p

Test point ---------▶

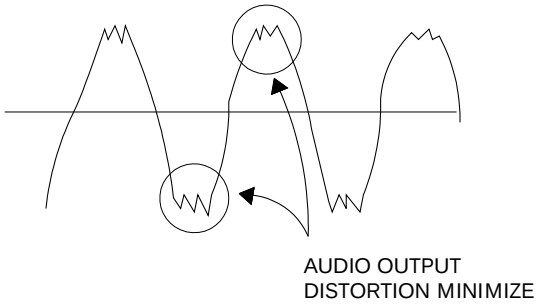
ADJ. point ——————▶



Main PCB (Comporent side)

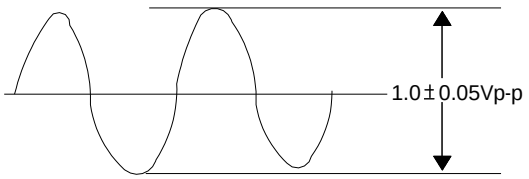
10. Audio BPF (Audio block)

1) PB, color bar tape.
2) Pin 4 of CTP01 and EVR.
3) Confirm the "A. AUDIO BPF" mode by pressing the "STILL" (mode change) button of remote control.
4) Connect an oscilloscope to pin 4 of CTP01.
5) Press the "REW(DATA DOWN)/FF(DATA UP)" button so that the output waveform is completed sine wave and the distortion is miniized.
6) Be sure to Press the "START/STOP(CONFIRM)" button on remote control to memorize setting.



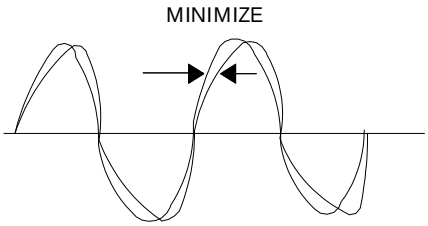
11. Audio 1.5MHz Deviation (Audio block)

1) PB, color bar tape.
2) Pin 4 of CTP01 and EVR.
3) Confirm the "B. AUDIO L" mode by pressing the "STILL" (mode change) button of remote control.
4) Connect an oscilloscope to pin 4 of CTP01.
5) Press the "REW(DATA DOWN)/FF(DATA UP)" button so that the pin4 of CTP01 is 1.0 ± 0.05Vp-p
6) Be sure to Press the "START/STOP(CONFIRM)" button on remote control to memorize setting.



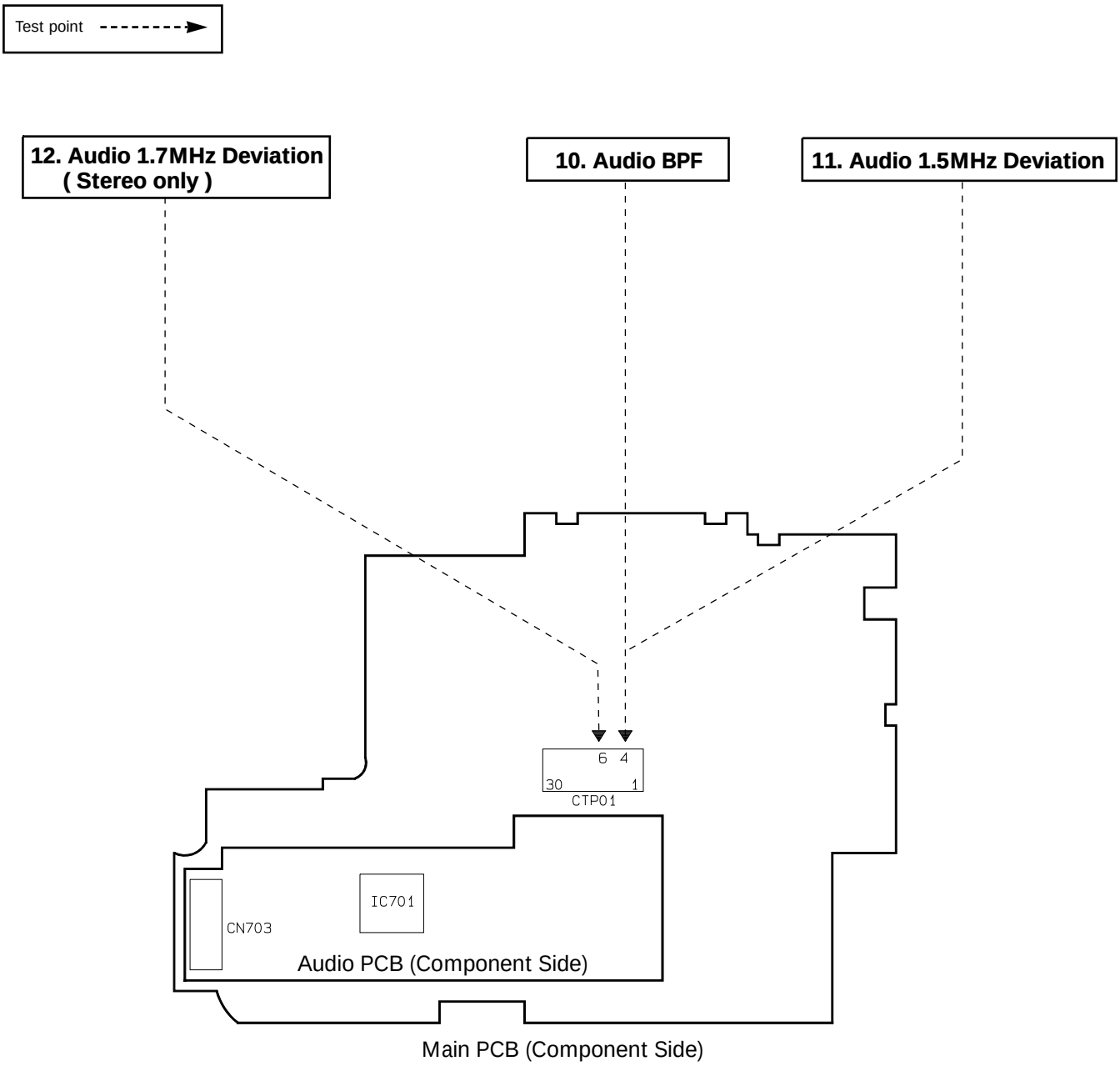
12. Audio 1.7MHz Deviation (Audio block)
- Stereo only

1) PB, color bar tape.
2) Pin 6 of CTP01 and EVR.
3) Confirm the "C. AUDIO R" mode by pressing the "STILL" (mode change) button of remote control.
4) Connect an oscilloscope to pin 6 of CTP01.
5) Press the "REW(DATA DOWN)/FF(DATA UP)" button so that the output of pin6 of CTP01 is minimize distortion.
6) Be sure to Press the "START/STOP(CONFIRM)" button on remote control to memorize setting.



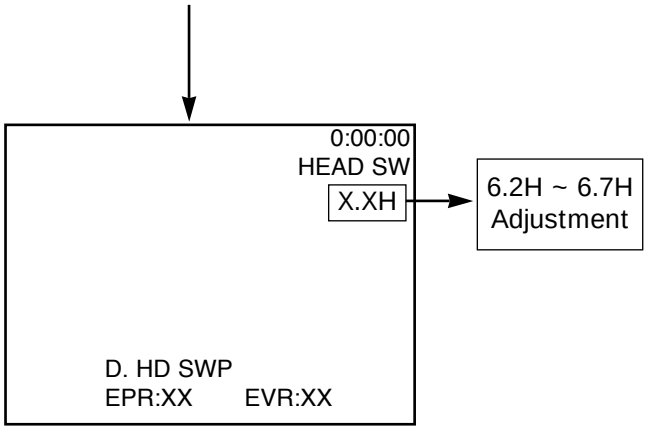
◆ Test point and adjustment points :

NO	Adjustment name	Test point	Adjustment point	Spec.
10	AUDIO BPF	Pin 4 of CTP01	EVR	-
11	AUDIO 1.5MHzDEVIATION	Pin 4 of CTP01	EVR	1.0±0.05Vp-p
12	AUDIO 1.7MHzDEVIATION	Pin 6 of CTP01	EVR	-



13. Head Switching (Servo block)

1) PB, color bar tape.
2) EVR.
3) Confirm the “D. HD SWP” mode by pressing the “STILL“ (MODE CHANGE) button of remote control.
4) Press the “REW(DATA DOWN)/FF(DATA UP)” button so that Head S/W data in EVF or CVF is 6.2H ~ 6.7H.
5) Be sure to press the “START/STOP (CONFIRM)” button on remote control to memorize setting.



(EVF or CVF OSD)

14. Model set

1) PB, color bar tape.
2) EVR.
3) Confirm the “E. MODEL” mode by pressing the “STILL“ (MODE CHANGE) button of remote control.
4) Press the “REW(DATA DOWN)/FF(DATA UP)” button so that OSD shows “EPR:XX EVR:XX”. “XX” is different depend on the models as shown below.
   - VP-A12 : 12
   - VP-A15 : 55
   - VP-A17 : 37
   - VP-A18 : 78
5) Be sure to press the “START/STOP (CONFIRM)” button on remote control to memorize setting.
6) After finishing the adjustment, reset main power source (OFF-ON) to operate the memorized model.

MEMO

6. Exploded View and Parts List

Page

6-1 Cabinet Assembly (1) - 6-2

6-2 Cabinet Assembly (2) - 6-4

6-3 Cabinet Assembly (3) - 6-6

6-4 Mechanical Parts (1) - 6-8

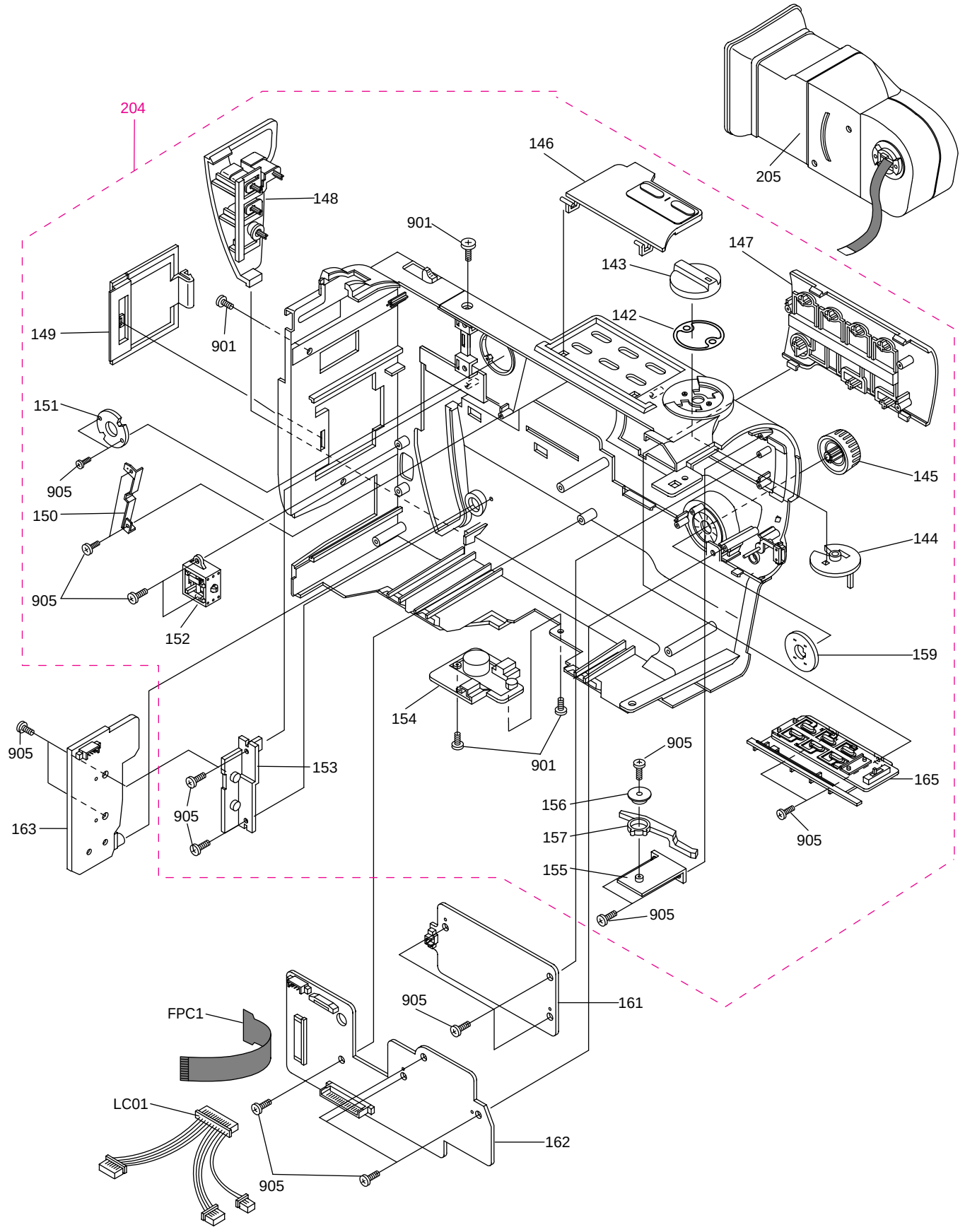
6-5 Mechanical Parts (2) - 6-10

6-6 Mechanical Parts (3) - 6-12

6-7 EVF (VP-A12/VP-A17) - 6-14

6-8 CVF (VP-A15/VP-A18) - 6-16

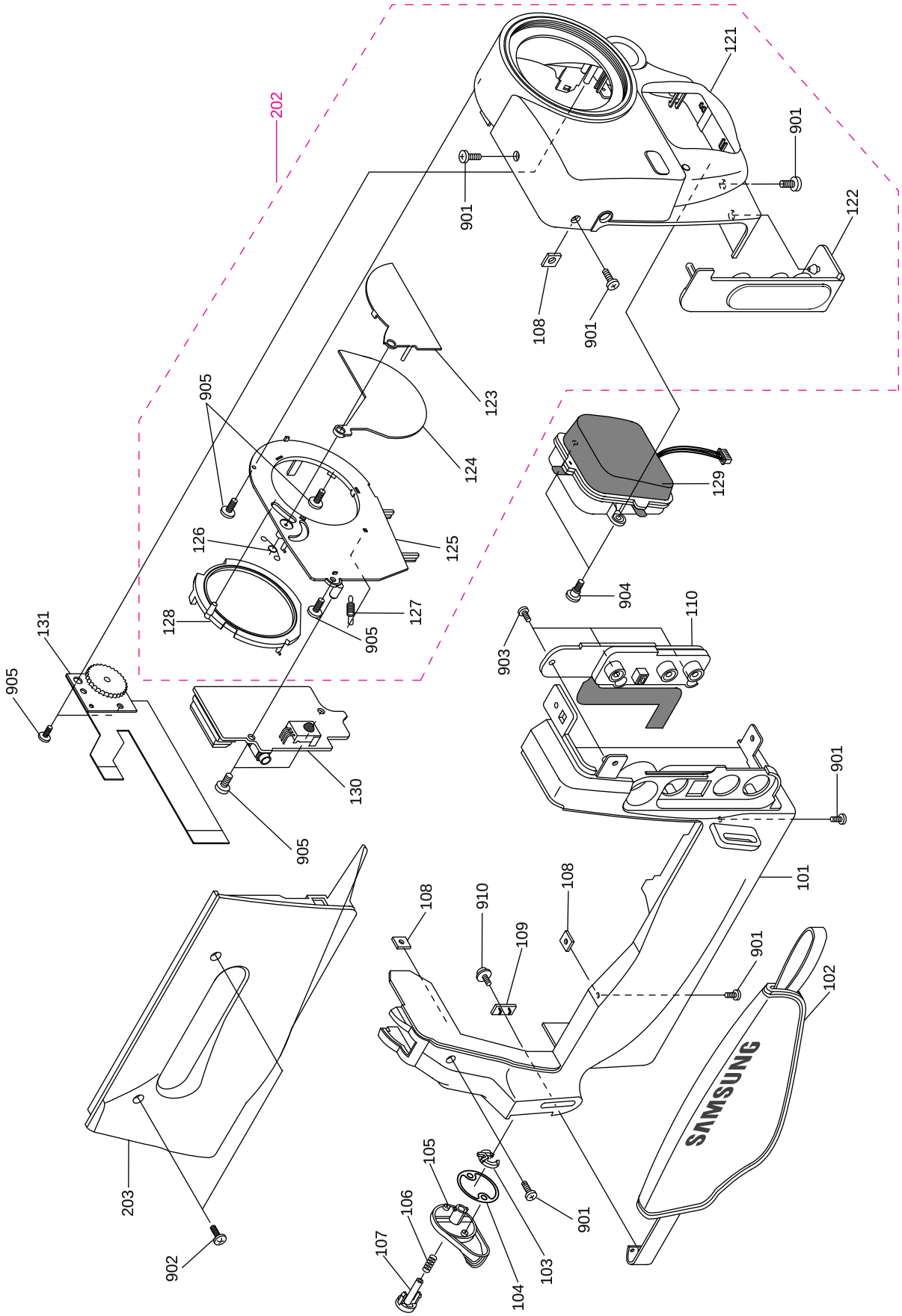
6-1 Cabinet Assembly (1)



Loc. No	New Part No	Description and Specification	Remark
142	AD61-60545A	SPRING-POWER;-,-,STS301H,T0.2,-,-,VP-A57	
143	AD64-10771A	KNOB-POWER;-,ABS94,HB,D/GRAY,-,VP-A57	
144	AD61-20973A	HOLDER-POWER;-,ABS94,HB,BLK,-,VP-A57	
145	AD64-10772E	KNOB-ROTARY;-,ABS94,HB,-,-,VP-A12,VP-A15	
	AD64-10772C	KNOB-ROTARY;-,ABS94,HB,-,-,VP-A17,VP-A18	
146	AD98-11219Q	ASSY-COVER FUNCTION;VP-A17,NOR	
147	AD59-10342E	UNIT-CASE SIDE;VP-A12,VP-A15	
	AD59-10342B	UNIT-CASE SIDE;VP-A17,VP-A18	
148	AD59-10384A	UNIT-CASE BACK;VP-A12,VP-A15	
	AD59-10341A	UNIT-CASE BACK;VP-A17,VP-A18	
149	AD63-30526A	COVER-BATTERY;-,ABS94,V0,-,BLK,-,-,VP-A57	
150	AD61-60532A	SPRING-EVF;-,-,BE-CU,-,-,-,VP-A57	
151	AD61-20976A	HOLDER-EVF;-,POM,-,BLK,-,VP-A57	
152	AC59-90001L	UNIT-BATTERY EJECT;VP-K70,-,-	
153	AD61-20975A	HOLDER-PCB;-,ABS94,HB,BLK,-,VP-A57	
154	AD98-12002D	ASSY-TRIPOD;VP-A57,-	
155	AD61-20972A	HOLDER-LEVER;-,ABS94,HB,BLK,-,VP-A57	
156	AD61-50679A	BUSH-LEVER;-,ABS94,V0,-,-,-,-,VP-A57	
157	AD66-30493A	LEVER-BUILT;-,ABS 94HB,-,-,BLK,VP-A57	
159	AD61-20971A	HOLDER-ROTARY;-,POM,-,NTR,-,VP-A57	
161	AD59-10402A	UNIT-FUNCTION,BLC;A-PJ,BLC ASSY	
162	AD59-10397A	UNIT-FUNCTION,DSE;VP-A12,VP-A17	
	AD59-10398A	UNIT-FUNCTION,DSE;VP-A15,VP-A18	
163	AD59-10403A	UNIT-FUNCTION,EAR;A-PJ,EAR ASSY	
165	AD98-11220L	ASSY-VTR FUNCTION;VP-A17,HOLDER+PCB+BUTTON	
204	AD98-11218P	ASSY-CASE LEFT;VP-A12	
	AD98-11218V	ASSY-CASE LEFT;VP-A15	
	AD98-11218S	ASSY-CASE LEFT;VP-A17	
	AD98-11221Z	ASSY-CASE LEFT;VP-A18	
205	AD90-10804X	ASSY-EVF;VP-A12,VP-A17	
	AD90-10812P	ASSY-CVF;VP-A15,VP-A18	
901	AC60-10020A	SCREW-MACHINE;BH,+,M2,X5,FZB,FE,UP,-,-	
905	AC60-10055A	SCREW-TAPPING;BH,+,-,M2,X4,FZB	
FPC1	AD41-20300W	FPC-FUNC;POLYWIDE,0.25,22P,VP-A57/SEG	
LC01	AD39-20825L	LEAD CONNECTOR-ASSY;-,51021-11P,51021-05/04/02P	

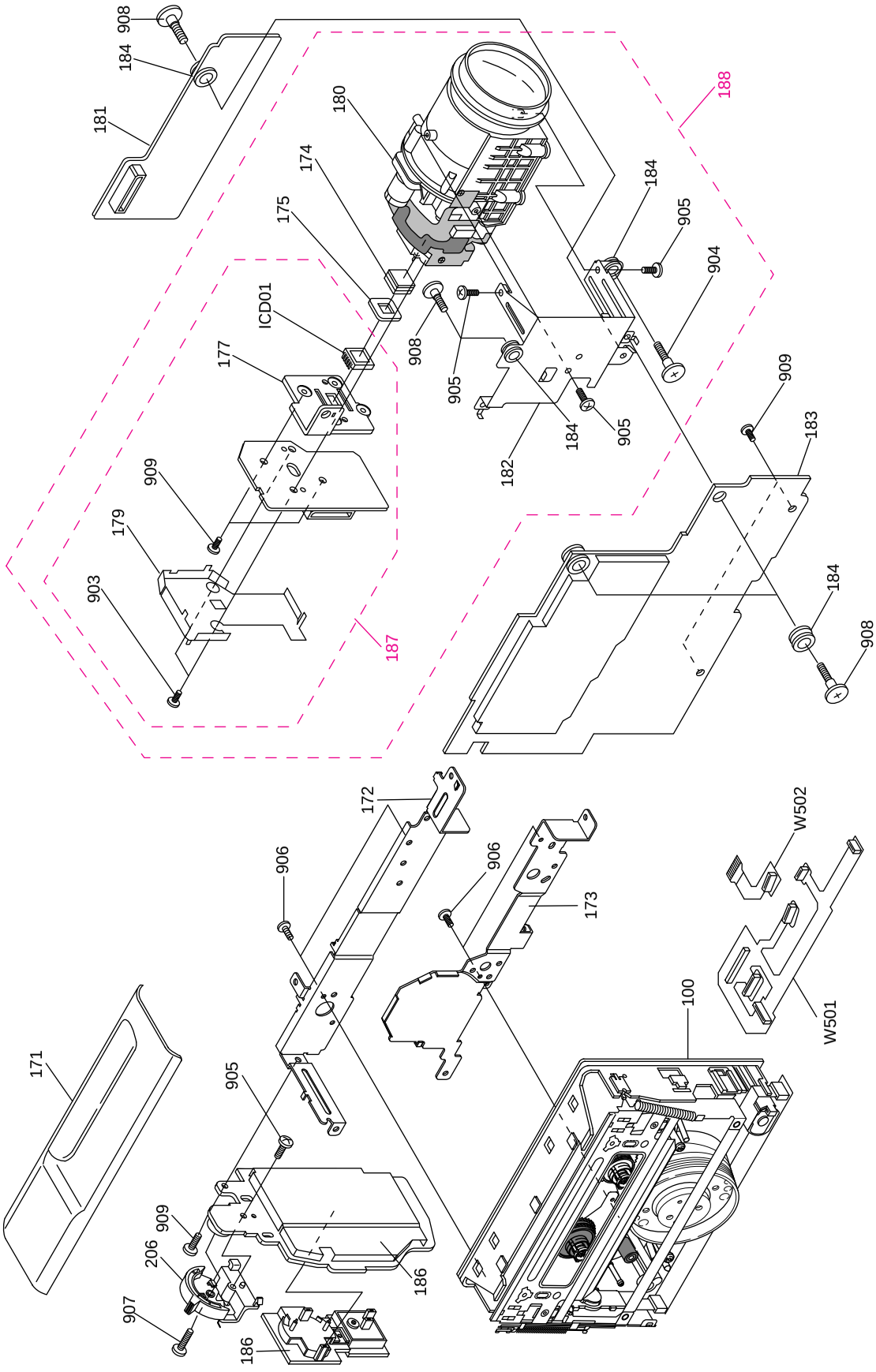
Note : The part number of Loca. No. 147, 204 may be different depend on the buyer. If it is changed, the separate information will be informed.

6-2 Cabinet Assembly (2)



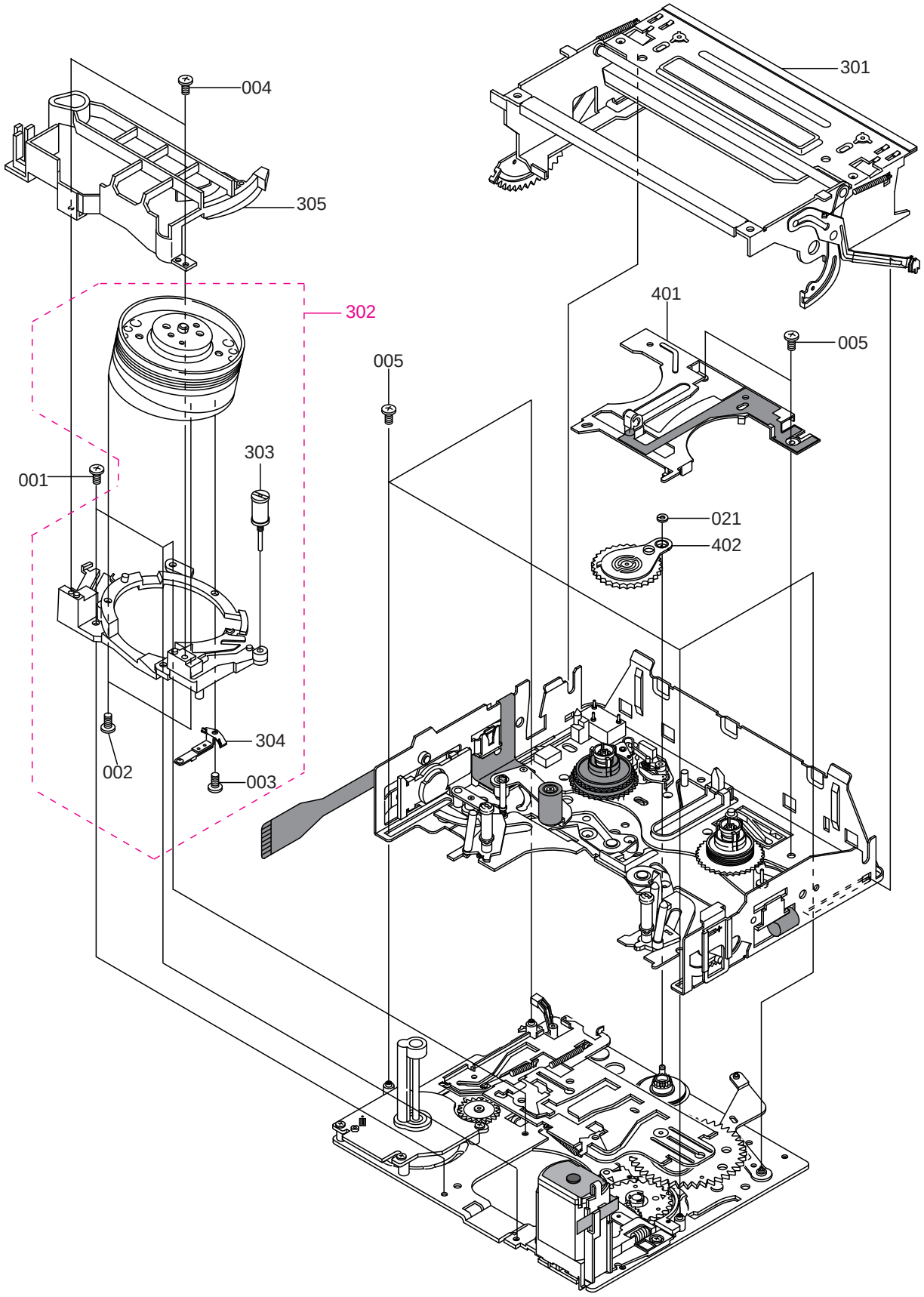
Loc. No	New Part No	Description and Specification	Remark
101	AD64-30840C	CASE-RIGHT;-,ABS94,HB,-,-,-,NORMAL,VP-A17	
102	AC63-10007A	GRIP-BELT ASSY;LEATHER,BLK,T1.5,-,SV-H66,-,-	
103	AD61-20978A	HOLDER-STAND/BY;-,POM,-,NTR,-,VP-A57	
104	AD61-60533A	SPRING-REC STOP;-,-,STS,T0.2,-,-,VP-A57	
105	AD64-10774A	KNOB-STAND/BY;-,ABS,HB,BLK,-,VP-A57	
106	AC61-60068A	SPRING-BUTTON;CS,STS304 WPB,P0.2,D4,L7,-,-	
107	AD64-10783A	BUTTON-REC;-,ABS94,HB,RED,-,VP-A57	
108	AC61-20223A	HOLDER-LOCK;SECC,T1.0,NAT,-,-,-	
109	AD61-20977A	HOLDER-GRIP;-,PBT,-,BLK,-,VP-A57	
110	AD37-20001B	JACK-AV ASSY;A-PJ,NOR,MONO,VP-A12	
	AD37-20001C	JACK-AV ASSY;A-PJ,NOR,STEREO,VP-A15,VP-A17,VP-A18	
121	AD64-30842G	CASE-FRONT;-,ABS 94,HB,-,-,BLK,-,VP-A12,VP-A15	
	AD64-30842A	CASE-FRONT;-,ABS 94,HB,-,-,D/GRAY,-,VP-A17,VP-A18	
122	AD63-30527A	COVER-JACK;-,PE,-,-,BLK,-,-,VP-A57	
123	AD63-30523A	COVER-LENS A;-,ABS94,HB,-,BLK,-,-,VP-A57	
124	AD63-30524A	COVER-LENS B;-,ABS94,HB,-,BLK,-,-,VP-A57	
125	AD61-20979A	HOLDER-LENS COVER;-,ABS 94,HB,BLK,-,VP-A57	
126	AD61-60534A	SPRING-COVER;-,-,SUS304,PI0.5,-,-,VP-A57	
127	AD61-60542A	SPRING-COVER(2);-,-,SUS304,PI0.18,OD2.2,-,VP-A	
128	AD63-30529A	COVER-ROTATE;-,ABS94,HB,-,-,-,-,VP-A57	
129	AD98-11219L	ASSY-MIC;MONO,VP-A12	
	AD98-11213A	ASSY-MIC;STEREO,VP-A15,VP-A17,VP-A18	
130	AD90-10809C	ASSY-MIC BOARD;A-PJ MONO MIC,VP-A12	
	AD90-10809A	ASSY-MIC BOARD;A-PJ STEREO VP-A15	
	AD90-10805C	ASSY-MIC BOARD;A-PJ STEREO MIC,EIS,VP-A17,VP-A18	
131	AD90-10808E	ASSY-FPC MIC;VP-A57/SEG,MIC	
202	AD59-10387A	UNIT-CASE FRONT;VP-A12,VP-A15	
	AD59-10340A	UNIT-CASE FRONT;VP-A17,VP-A18	
203	AD59-10408A	UNIT-COVER HOUSING;VP-A17,-	
901	AC60-10020A	SCREW-MACHINE;BH,+,M2,X5,FZB,FE,UP,-,-	
902	AD60-10001A	SCREW-MACHINE;BH,B,1.7*5.5,-,FE,BLACK,-,VP-K	
903	AC60-10054A	SCREW-TAPPING;BH,+,-,M2,X6,FZB	
904	AC60-12119A	SCREW-TAP TITE;-,BH,+,-,-,SWRCH18A2P4	
905	AC60-10055A	SCREW-TAPPING;BH,+,-,M2,X4,FZB	
910	AD60-10509A	SCREW-TAP TITE;-,PWH,+,-,M2X5,5,-	

6-3 Cabinet Assembly (3)



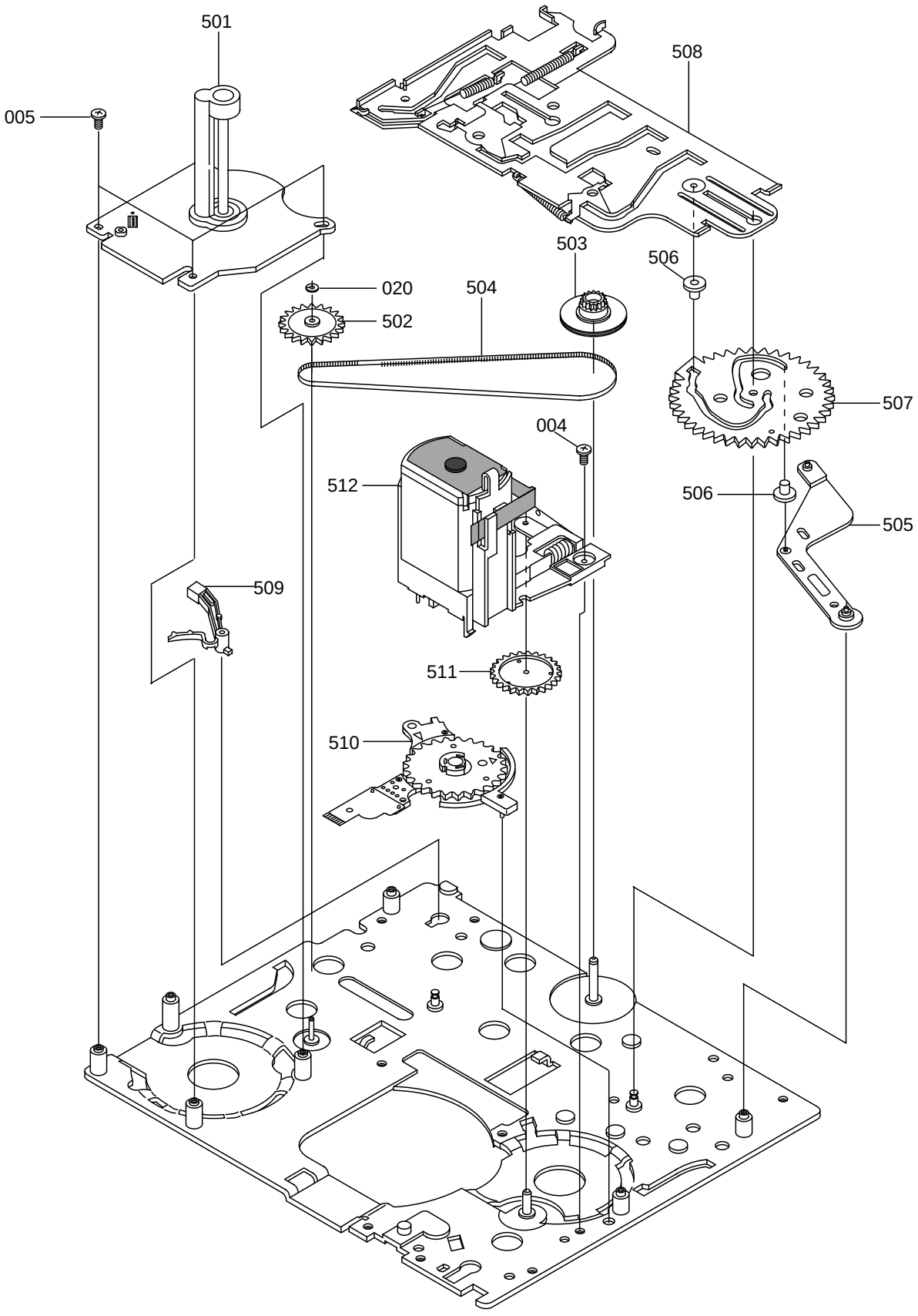
Loc. No	New Part No	Description and Specification	Remark
100	AC96-10013V	ASSY-DECK 8MM;DE-6PN,-	
171	AD98-11205B	ASSY-CASE TOP;VP-A57,-	
172	AD61-10985A	BRACKET-DECK A;-,STS301,-,T0.5,-,-,VP-A57	
173	AD61-10986A	BRACKET-DECK B;-,STS301,-,T0.5,-,-,VP-A57	
174	AC29-92002D	FILTER-OLP;SV-3C01MM,KSS,-,-	
175	AC63-62007A	SPACER-CCD;SILICON,-,BLK,-,VP-K70,-	
177	AD61-30171B	PLATE-CCD;-,AL,T1.2,-,VP-A17(NOR)	
179	AD63-40839A	SHIELD-CASE CCD;-,SPTE,T0.2,-,VP-A57	
180	AD90-10809R	ASSY-LENS ZOOM;SV-A57,SEC 16X ZOOM	
181	AD90-10808V	ASSY-AUDIO BOARD;MONO AUDIO,VP-A12	
	AD90-10809B	ASSY-AUDIO BOARD;STEREO AUDIO,VP-A15	
	AD90-10806Y	ASSY-AUDIO BOARD;STEREO AUDIO,EIS,VP-A17,VP-A18	
182	AD61-10990A	BRACKET-LENS;-,STS301,-,0.5,-,-,VP-A57	
183	AD90-10808X	ASSY-MAIN BOARD;S8C-PAL,MONO,D.ZM,VP-A12	
	AD90-10814Y	ASSY-MAIN BOARD;S8C-PAL,STEREO,D.ZM,VP-A15	
	AD90-10804C	ASSY-MAIN BOARD;S8C-PAL,VP-A17	
	AD90-10815A	ASSY-MAIN BOARD;S8C-PAL,VP-A18	
184	AC64-10176A	KNOB-RUBBER-LENS;NR,-,BLK,-,VP-K70,-	
185	AD59-10407A	UNIT-DC/DC BOARD;VP-A17,DC-DC ASSY	
186	AD59-10331A	UNIT-BATT TERMINAL;VP-A57,-	
187	AD90-10812F	ASSY-CCD BOARD;VP-A12,VP-A15	
	AD90-10808S	ASSY-CCD BOARD;VP-A17,VP-A18	
188	AD90-10812G	ASSY-CCD;VP-A12,VP-A15	
	AD90-10803Z	ASSY-CCD;VP-A17,VP-A18	
206	AD59-10343A	UNIT-KNOB T/W;VP-A57,-	
903	AC60-10054A	SCREW-TAPPING;BH,+,-,M2,X6,FZB	
904	AC60-12119A	SCREW-TAP TITE;-,BH,+,-,-,SWRCH18A2P4	
905	AC60-10055A	SCREW-TAPPING;BH,+,-,M2,X4,FZB	
906	AC60-10017A	SCREW-MACHINE;BH,+,M1.7,X3.5,FEFZY,SWCH1018,	
907	AD60-10510A	SCREW-MACHINE;-,PLAN,+,-,M1.4X5,5,BLK,FE-ZN,	
908	AD60-10507A	SCREW-SPACER;-,PLAN,+,-,M2.0X0.35,8.2,BLK,M	
909	AC60-10024A	SCREW-MACHINE;BH,+,M2,X3,FZW,FE,-,-,-	
ICD01	0605-001009	CCD;COLOR,DIP,14,400MIL,320K,7.3X4,VP-A12,VP-A15	
	0605-001005	CCD;COLOR,DIP,14P,400MIL,570K,4.85,VP-A17,VP-A18	
W501	AD90-10808C	ASSY-FPC DECK;VP-A57/SEG,DECK	
W502	AD90-10808D	ASSY-FPC PRE-AMP;VP-A57/SEG,VCR-MAIN	

6-4 Mechanical Parts (1)



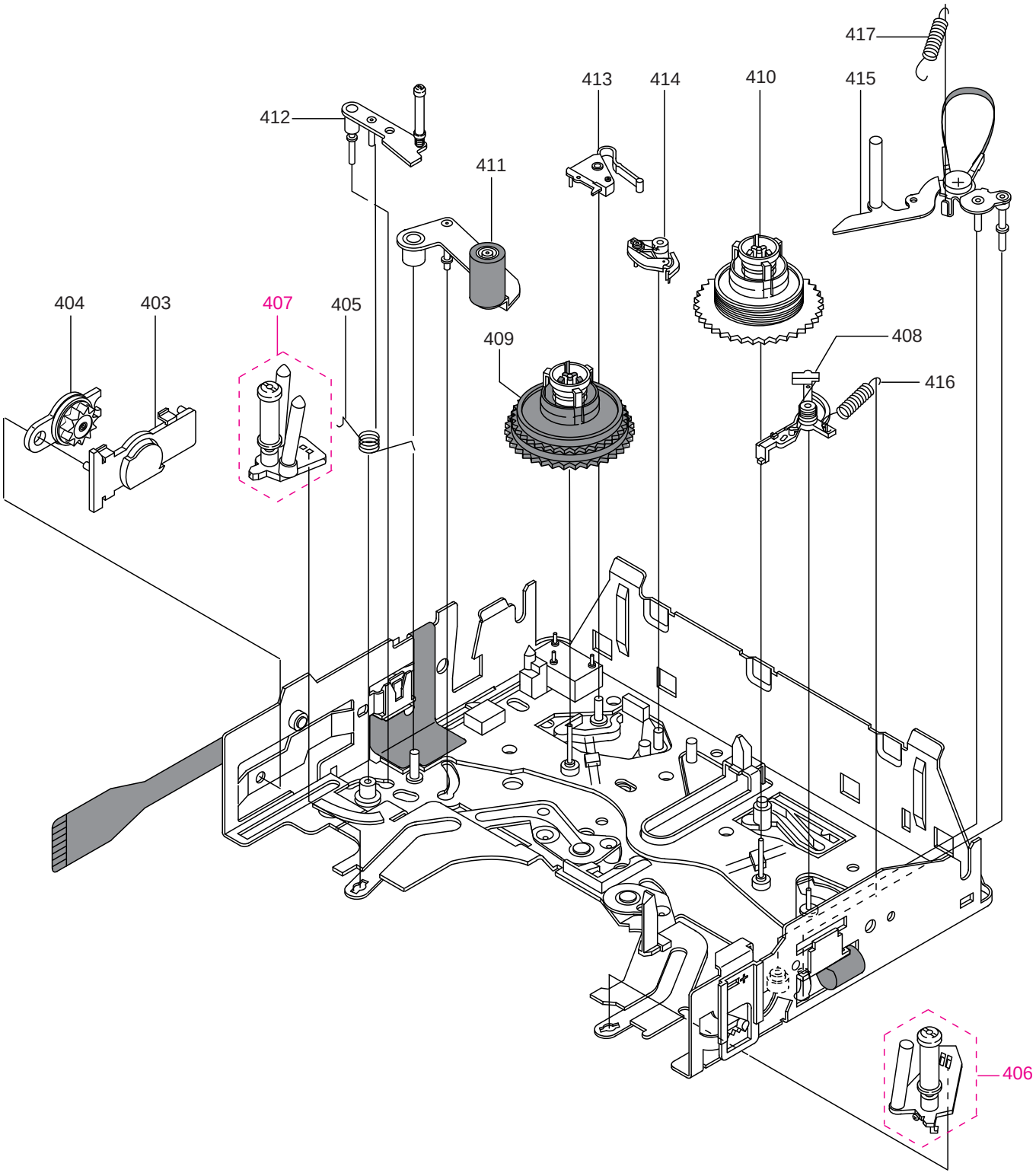
Loc. No	New Part No	Description and Specification	Remark
001	AC60-12115A	SCREW;UP,BH,-,M2,L9,SWRCH10A HDZ45	
002	AC60-10500E	SCREW-MACHINE;-,BWSH,+UP,M2,L5,ZPCNYLOCK,SWR	
003	AC60-10500E	SCREW-MACHINE;-,BWSH,+UP,M2,L5,ZPCNYLOCK,SWR	
004	AC60-10017A	SCREW-MACHINE;BH,+,M1.7,X3.5,FEFZY,SWCH1018,	
005	AC60-12112A	SCREW-BH;-,BH,+,M1.4,L2,-	
021	AC60-30015A	WASHER-SLIT;ID 1.1,OD 2.6,T 0.4,POLYSLIDER	
301	AC61-82004A	HOUSING-ASSY;-,-,-,DE-6,-	
302	AC96-10005X	ASSY-DRUM;DE5-6PH-SS,-	
303	AC66-40153A	ROLLER-IMP ASSY;-,YF-10,OD7,-,DE-6	
304	AC61-72009A	CONTACT-EARTH BRUSH;SECC/PBSP/CR/C,-,-,-,-,DE-5,-	
305	AC63-32091A	COVER-DRUM;DURACON(M90-44),-,-,-,-,-,DE-6	
401	AC63-30009A	COVER-REEL ASSY;ABS 95,HB,-,-,-,-,DE-6,-	
402	AC66-12035A	IDLER-ASSY;-,-,DE-6	

6-5 Mechanical Parts (2)



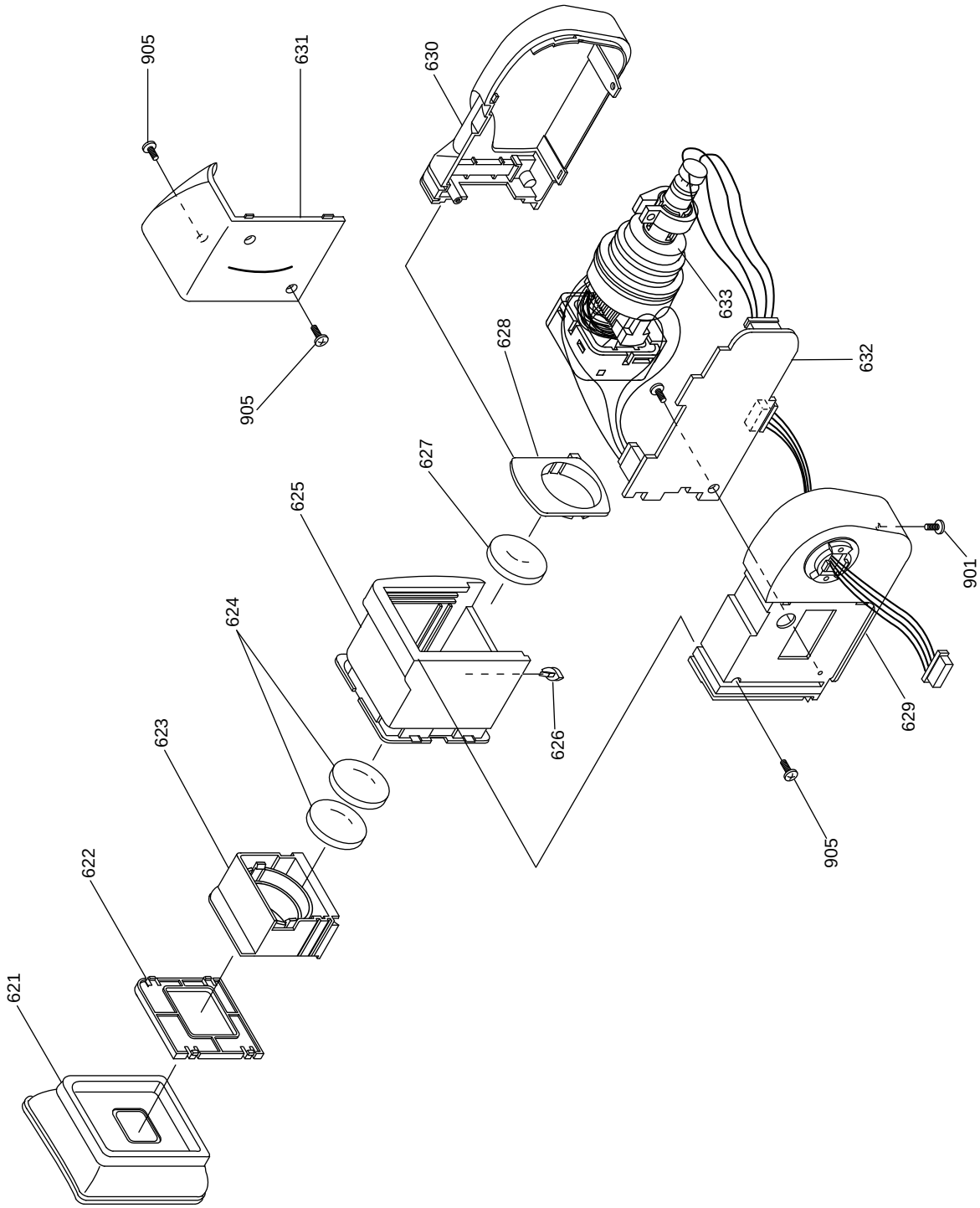
Loc. No	New Part No	Description and Specification	Reamrk
004	AC60-10017A	SCREW-MACHINE;BH,+,M1.7,X3.5,FEFZY,SWCH1018,	
005	AC60-12112A	SCREW-BH;-,BH,+,M1.4,L2,-	
020	AC60-30017A	WASHER-SLIT;ID 1,OD 2.6,T 0.4,POLYSLIDER,-	
501	AD31-12002A	MOTOR-CAPSTAN;DMCCHL06B,-,-	
502	AC66-22123A	GEAR-CAPSTAN(ASSY);-,-,-,-,-,DE-6	
503	AC66-22124A	GEAR-PULLEY(ASSY);-,-,-,-,-,DE-6	
504	AC66-62001A	BELT-TIMMING;POLYURETHAN,L137 T0.4,-,-,-,-	
505	AC66-32197A	LEVER-CAM;SUS430-CP,T0.6,-,-,DE-6,-	
506	AC66-42005A	ROLLER-CAM MAIN;SUS303,-,-,PI3.5X1.1	
507	AC66-22092A	GEAR-CAM MAIN;SUS304-CSP,M0.5,Z64,-,-,-	
508	AC66-82055A	SLIDER-MAIN(ASSY);-,-,-,-,DE-6	
509	AC66-32198A	LEVER-EJECT;DURANEX #3300,-,-,-,DE-6,-	
510	AC34-22001C	SWITCH-MODE ASSY;HMW0484-01WA,DE-6,-,-,-,-,-,-	
511	AC66-22126A	GEAR-LOADING;DURACON(99-44),M0.4,Z37 WO,-,-	
512	AC31-12001P	MOTOR-LOADING ASSY;DE-6,-,-	

6-6 Mechanical Parts (3)



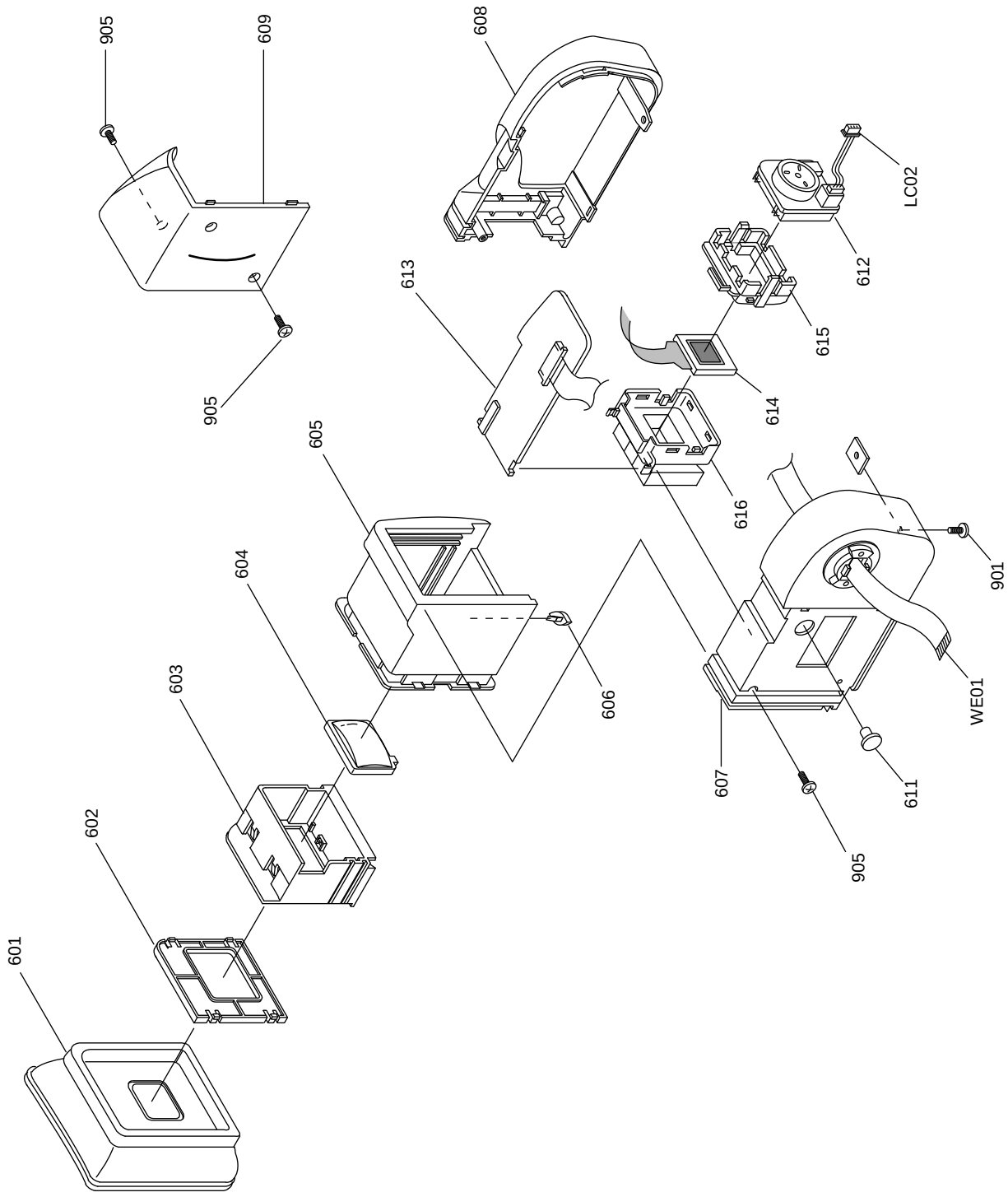
Loc. No	New Part No	Description and Specification	Remark
403	63313-0198-00	COVER-DAMPER;DURACON(M90-44) NTR DE-6	
404	AC61-82002A	DAMPER-HOUSING;Y29TO-E,-,14G,-,-,DE-6,-	
405	62724-0278-00	SPRING-REVIEW ARM;PS SUS304-WPB PI0.3	
406	AC61-52014A	POLE-BASE S(ASSY);ZDC2/SUS303,-,-,-,-,DE-6,-	
407	AC61-52015A	POLE-BASE T(ASSY);ZDC2/SUS303,-,-,-,-,DE-6,-	
408	AC66-32221A	BRAKE-SUB S(ASSY);-,-,-,-,DE-6,-	
409	AC66-12042A	REEL-T(ASSY);-,-,-,DE-6	
410	AC66-12041A	REEL-S(ASSY);-,-,-,DE-6	
411	AC66-32217A	ARM-PINCH ROLLER(ASS;-,-,-,-,DE-6	
412	AC66-32213A	ARM-REVIEW ASSY;-,-,-,-,DE-6	
413	AC66-32223A	BRAKE-MAIN(T);DURACON(M904-44),-,-,-,-,-	
414	AC66-30120A	BRAKE-SOFT T (ASSY);-,-,-,-,DE-6,-	
415	AC66-30093A	ARM-TENSION (ASSY);SUS304-CSP POM FELT,-,-,-,DE-	
416	AC61-62022A	SPRING-SOFT BRAKE(S);-,SUS304,-,-,-,-,-	
417	AC61-62023A	SPRING-TENSION;-,SUS304-WPB,-,-,-,-,-	

6-7 EVF (VP-A12/VP-A17)



Loc. No	New Part No	Description and Specification	Remark
621	AD73-10014A	RUBBER-EYE CUP;SILICON,-,VP-A57,-	
622	AD61-40376A	STOPPER-LENS;-,ABS94,HB,-,-,VP-A57	
623	AD61-20990A	HOLDER-LENS(B/W);-,ABS 94,HB,-,-,VP-A57	
624	AC67-12070A	LENS-EVF(MD);PMMA D19.1 ASP,-,-,-,-	
625	AD61-11007B	BODY-LENS;-,ABS94,HB,-,-,-,VP-A17	
626	AD64-10777A	KNOB-SLIDE;-,ABS,HB,-,-,VP-A57	
627	AC67-10066A	LENS-EVF GJ;-,OPT,GRASS -F1,D11.5,-,CS 96.-	
628	AC61-20260A	HOLDER-EYE LENS B;ABS 94,HB,BLK,-,-,VP-A57	
629	AD98-11219W	UNIT-EVF R (B/W);VP-A17,-	
630	AD64-30843B	CASE-EVF L;-,ABS 94,V0,-,-,-,-,VP-A17	
631	AD63-30538A	COVER-CASE EVF;-,ABS94,HB,-,BLK,-,-,VP-A57	
632	AD90-10803R	ASSY-EVF BOARD;CS97A,PAL	
633	AC90-10012V	ASSY-CRT;CS96(SPORTS),-	
901	AC60-10020A	SCREW-MACHINE;BH,+,M2,X5,FZB,FE,UP,-,-	
905	AC60-10055A	SCREW-TAPPING;BH,+,-,M2,X4,FZB	
WE02	AD39-20825F	LEAD CONNECTOR-ASSY;-,51021,51021,5P,110MM,1061#	

6-8 CVF (VP-A15/VP-A18)



Loc. No	New Part No	Description and Specification	Remark
601	AD73-10014A	RUBBER-EYE CUP;SILICON,-,VP-A57,-	
602	AD61-40376A	STOPPER-LENS;-,ABS94,HB,-,-,VP-A57	
603	AD61-20989A	HOLDER-LENS(COLOR);-,ABS 94,HB,-,-,VP-A57	
604	AC67-12071A	LENS-EVF;PMMA D22.8 SQ,-,-,-,-,-	
605	AD61-11007A	BODY-LENS;-,ABS94,HB,-,BLK,-,-,VP-A57	
606	AD64-10777A	KNOB-SLIDE;-,ABS,HB,-,-,VP-A57	
607	AD98-11219W	UNIT-EVF R (B/W);VP-A17	
608	AD64-30843B	CASE-EVF L;-,ABS 94,V0,-,-,-,-,VP-A17	
609	AD63-30538A	COVER-CASE EVF;-,ABS94,HB,-,BLK,-,-,VP-A57	
611	AD61-20918A	CAP-FOCUS;-,MBR,-,BLK,-,VP-K70	
612	AD90-10806T	ASSY-B/L BOARD;VP-A57,PAL	
613	AD90-10806U	ASSY-CVF BOARD;VP-A57,PAL	
614	AC07-10001L	LCD DISPLAY;LCX005BKB,COLOR,537*222,0.5 IN	
615	AC61-20173A	HOLDER-LIGHT;ABS 94,HB,BLK,-,VP-K75,-	
616	AD61-22009A	HOLDER-LCD;-,ABS 94,HB,-,-,CS97	
901	AC60-10020A	SCREW-MACHINE;BH,+,M2,X5,FZB,FE,UP,-,-	
905	AC60-10055A	SCREW-TAPPING;BH,+,-,M2,X4,FZB	
WE01	AD41-20301B	FPC-CVF;POLYMIDE,T0.18,12P,VP-A57	
WE02	AC39-20017C	LEAD CONNECTOR-ASSY;75MM,51021-03,1.5/1.25MM,CGP	

MEMO

7. Electrical Parts List

Note : 1. According to the change of Part-No system, old and new parts are listed in this service manual together. When ordering a service part, be sure to use the only new part.

Loc. No	New Part No	Description and Specification	Remark
185	**AD59-10407A**	**UNIT-DC/DC BOARD**	
BT901	AD59-10331A	UNIT-BATT TERMINAL;VP-A57,-	
C901	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C902	2203-000512	C-CERAMIC,CHIP;2.2UF,+80-20%,16V,Y5V,3216,-,T	
C903	2203-000512	C-CERAMIC,CHIP;2.2UF,+80-20%,16V,Y5V,3216,-,T	
C904	2203-001724	C-CERAMIC,CHIP;4.7UF,+80-20%,16V,Y5V,3216,-,T	
C905	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C906	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C907	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C908	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C909	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C910	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C911	2404-000120	C-TA,CHIP;10UF,20%,10V,-,3528,-,TP	
C912	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C915	2404-000120	C-TA,CHIP;10UF,20%,10V,-,3528,-,TP	
C916	2203-000512	C-CERAMIC,CHIP;2.2UF,+80-20%,16V,Y5V,3216,-,T	
C917	2404-000120	C-TA,CHIP;10UF,20%,10V,-,3528,-,TP	
C918	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C919	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C920	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C921	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C922	2203-000512	C-CERAMIC,CHIP;2.2UF,+80-20%,16V,Y5V,3216,-,T	
C923	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C924	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C925	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	
C926	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C927	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C928	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C929	2203-001636	C-CERAMIC,CHIP;33PF,5%,50V,CH,1608,1.6MM,TP	
C930	2203-000888	C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,1608,-,TP	
C931	2203-001636	C-CERAMIC,CHIP;33PF,5%,50V,CH,1608,1.6MM,TP	
C932	2203-001632	C-CERAMIC,CHIP;330PF,5%,50V,CH,1608,1.6MM,TP	
C933	2203-001640	C-CERAMIC,CHIP;390PF,10%,50V,X7R,1608,1.6MM,T	
C934	2203-002220	C-CERAMIC,CHIP;56PF,0.05,50V,CH,1608,-,TP	
C935	2203-001632	C-CERAMIC,CHIP;330PF,5%,50V,CH,1608,1.6MM,TP	
C936	2203-001640	C-CERAMIC,CHIP;390PF,10%,50V,X7R,1608,1.6MM,T	
C937	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C938	2203-001636	C-CERAMIC,CHIP;33PF,5%,50V,CH,1608,1.6MM,TP	
C940	2203-000512	C-CERAMIC,CHIP;2.2UF,+80-20%,16V,Y5V,3216,-,T	
C949	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C950	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
CN901	3711-003365	CONNECTOR-HEADER;BOX,36P,2R,0.8MM,ANGLE,SN	
CN902	B6012-0249	CONNECTOR-HOUSING;SD-52365-0891 WHT MOLEX	
D901	0404-000150	DIODE-SCH0TTKY;EC10QS04,40V,1A,SMD,TP	
D902	0407-001013	DIODE-ARRAY;MA160A,80V,100MA,CX2,SOT-143,T	
IC901	1203-000445	IC-PWM CONTROLLER;14641,QFP,48P,-,PLASTIC,13V,69	
L901	2703-000398	INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	
L902	2703-000398	INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	

Loc. No	New Part No		Description and Specification	Remark
L903	2703-001117		INDUCTOR-SMD;10UH,20%,7X7X3.2MM	
L904	2703-000414		INDUCTOR-SMD;22UH,20%,7X7X3.2MM	
L905	2703-000398		INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	
L906	2703-000398		INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	
L907	2703-000398		INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	
L908	2703-000398		INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	
L909	2703-000398		INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	
L910	2703-000398		INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	
L911	2703-000398		INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	
L912	2703-000398		INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	
L913	2703-001194		INDUCTOR-SMD;100UH,20%,7X7X3.2MM	
L914	2703-001194		INDUCTOR-SMD;100UH,20%,7X7X3.2MM	
L915	2703-000398		INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	
L916	2703-000399		INDUCTOR-SMD;100UH,10%,3.2X2.5X2.2MM	
L917	2703-000399		INDUCTOR-SMD;100UH,10%,3.2X2.5X2.2MM	
L918	2703-000398		INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	
L919	2703-000399		INDUCTOR-SMD;100UH,10%,3.2X2.5X2.2MM	
PS901	3601-001036	⚠	FUSE-SMD;125V,2A,FAST ACTING,CERAMIC,3.	
Q901	0502-000432		TR-POWER;2SB1302,PNP,1.3W,SC-62,TP,100-	
Q902	0504-000113		TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
Q903	0501-000172		TR-SMALL SIGNAL;2SB1121,PNP,500MW,PCP,TP,100-5	
Q904	0501-000681		TR-SMALL SIGNAL;FP101,PNP,1.3W,PCP4,TP,140-560	
Q905	0501-000681		TR-SMALL SIGNAL;FP101,PNP,1.3W,PCP4,TP,140-560	
Q906	0501-000172		TR-SMALL SIGNAL;2SB1121,PNP,500MW,PCP,TP,100-5	
Q907	0504-000113		TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
Q908	0504-000107		TR-DIGITAL;DTA144EU,PNP,200MW,47K-47K,SC-	
Q909	0504-000107		TR-DIGITAL;DTA144EU,PNP,200MW,47K-47K,SC-	
Q910	0504-000113		TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
R901	2007-000094		R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
R902	2007-000094		R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
R903	2007-001699		R-CHIP;120KOHM,0.5%,1/16W,DA,TP,1608	
R904	2007-001694		R-CHIP;12KOHM,0.5%,1/16W,DA,TP,1608	
R905	2007-007202		R-CHIP;51KOHM,0.5%,1/16W,DA,TP,1608	
R906	2007-000094		R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
R907	2007-007204		R-CHIP;5.1KOHM,0.5%,1/16W,DA,TP,1608	
R908	2007-000575		R-CHIP;220OHM,5%,1/8W,DA,TP,3216	
R909	2007-000575		R-CHIP;220OHM,5%,1/8W,DA,TP,3216	
R910	2007-000086		R-CHIP;5.6KOHM,5%,1/16W,DA,TP,1608	
R911	2007-000079		R-CHIP;1.8KOHM,5%,1/16W,DA,TP,1608	
R912	2007-000086		R-CHIP;5.6KOHM,5%,1/16W,DA,TP,1608	
R914	2007-000079		R-CHIP;1.8KOHM,5%,1/16W,DA,TP,1608	
R915	2007-000101		R-CHIP;82KOHM,5%,1/16W,DA,TP,1608	
R916	2007-000092		R-CHIP;15KOHM,5%,1/16W,DA,TP,1608	
R917	2007-000134		R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
R918	2007-000082		R-CHIP;3.3KOHM,5%,1/16W,DA,TP,1608	
R922	2007-000134		R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
R923	2007-000078		R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R924	2007-001695		R-CHIP;22KOHM,0.5%,1/16W,DA,TP,1608	
R925	2007-000090		R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R926	2007-000090		R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R927	2007-001114		R-CHIP;680KOHM,5%,1/16W,DA,TP,1608	
R929	2007-000086		R-CHIP;5.6KOHM,5%,1/16W,DA,TP,1608	
R930	2007-000086		R-CHIP;5.6KOHM,5%,1/16W,DA,TP,1608	
R931	2007-000082		R-CHIP;3.3KOHM,5%,1/16W,DA,TP,1608	
R932	2007-000081		R-CHIP;2.7KOHM,5%,1/16W,DA,TP,1608	

Loc. No	New Part No		Description and Specification	Remark
R933	2007-000097		R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
R934	2007-000094		R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
R935	2007-000090		R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R936	2007-000129		R-CHIP;27KOHM,5%,1/16W,DA,TP,1608	
R937	2007-000101		R-CHIP;82KOHM,5%,1/16W,DA,TP,1608	
SW901	3404-001031		SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW902	3408-000296		SWITCH-SLIDE;5V,1A,-,-	
T901	AD26-20120E	⚠	TRANS-CONVERTER;REEL,-,CMS64(480UH):VP-A57	
VR901	2104-000115		VR-SMD;1KOHM,25%,0.15W,TOP	
VR902	2101-001018		VR-ROTARY;50KOHM,30%,0.03W,TOP	

183 ASSY-MAIN BOARD

	AD90-10808X	VP-A12
	AD90-10814Y	VP-A15
	AD90-10804C	VP-A17
	AD90-10815A	VP-A18

SYSTEM CONTROL/SERVO PARTS

C501	2402-000112	C-AL,SMD;10UF,20%,16V,GP,3X5.5,-,TP
C502	2402-001010	C-AL,SMD;47UF,20%,16V,GP,6.6X6.6X5.4MM,
C503	2402-001003	C-AL,SMD;22UF,20%,6.3V,-,4.3X4.3X5.8MM,
C504	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,2012,-,T
C505	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP
C506	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP
C507	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP
C508	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP
C509	2203-000888	C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,1608,-,TP
C510	2203-001609	C-CERAMIC,CHIP;22NF,10%,16V,X7R,1608,1.6MM,TP
C511	2203-001609	C-CERAMIC,CHIP;22NF,10%,16V,X7R,1608,1.6MM,TP
C512	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP
C513	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP
C514	2203-002218	C-CERAMIC,CHIP;47NF,0.1,16V,X7R,1608,-,TP
C515	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP
C516	2203-002218	C-CERAMIC,CHIP;47NF,0.1,16V,X7R,1608,-,TP
C517	2203-000491	C-CERAMIC,CHIP;2.2NF,10%,50V,X7R,1608,-,TP
C518	2203-001693	C-CERAMIC,CHIP;820PF,10%,50V,X7R,1608,1.6MM,T
C519	2203-001640	C-CERAMIC,CHIP;390PF,10%,50V,X7R,1608,1.6MM,T
C520	2203-001658	C-CERAMIC,CHIP;47PF,5%,50V,CH,1608,1.6MM,TP
C524	2203-002218	C-CERAMIC,CHIP;47NF,0.1,16V,X7R,1608,-,TP
C525	2203-000715	C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,1608,-,TP
C526	2203-000715	C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,1608,-,TP
C527	2203-000715	C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,1608,-,TP
C528	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP
C529	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP
C530	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6
C531	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6
C532	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6
C533	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6
C534	2203-002218	C-CERAMIC,CHIP;47NF,0.1,16V,X7R,1608,-,TP
C535	2404-000151	C-TA,CHIP;1UF,20%,16V,-,3216,-,TP
C536	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP
C537	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP
C538	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP
C539	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP
C540	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,2012,-,T

Loc. No	New Part No	Description and Specification	Remark
C541	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,2012,-,T	
C542	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,2012,-,T	
C543	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
C544	2203-001598	C-CERAMIC,CHIP;2.2UF,+80-20%,16V,Y5V,2012,-,T	
C545	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
C546	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
C547	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C548	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C601	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C602	2404-000112	C-TA,CHIP;100UF,20%,6.3V,-,7343,-,TP	
C603	2404-000259	C-TA,CHIP;47UF,20%,6.3V,-,6032,-,TP	
C604	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C605	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C606	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C607	2404-000232	C-TA,CHIP;4.7UF,20%,10V,-,3216,-,TP	
C608	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C609	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C610	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
C611	2203-001103	C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,1608,-,TP	
C612	2203-000626	C-CERAMIC,CHIP;22PF,5%,50V,CH,1608,-,TP	
C613	2203-000626	C-CERAMIC,CHIP;22PF,5%,50V,CH,1608,-,TP	
C614	2203-000384	C-CERAMIC,CHIP;15PF,5%,50V,CH,1608,-,TP	
C615	2203-000384	C-CERAMIC,CHIP;15PF,5%,50V,CH,1608,-,TP	
C616	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C617	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C618	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C619	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C620	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C621	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C622	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C623	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C624	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C625	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C626	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
C627	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C628	2203-001103	C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,1608,-,TP	
C629	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CN501	3710-000397	CONNECTOR-SOCKET;36P,2R,0.8MM,STRAIGHT,SN	
CN502	3708-000403	CONNECTOR-FPC/FC/PIC;22P,0.5MM,STRAIGHT,SN	
CN503	3711-002130	CONNECTOR-HEADER;BOX,48P,2R,0.8,ANGLE,SN	
CTP01	3710-000396	CONNECTOR-SOCKET;30P,2R,0.8MM,STRAIGHT,SN	
IC501	AC14-12007Q	IC-LOGIC;BA6285FS,SOP,-	
IC502	AC14-12005J	IC-LOGIC;KA8322,QFP,-	
IC503	1003-001072	IC-MOTOR DRIVER;LB1888V,SOP,30P,220MIL,TRIPLE,	
IC504	1003-001073	IC-MOTOR DRIVER;LB1886V,SOP,24P,22MIL,TRIPLE,1	
IC601	AD09-10450U	IC-MCU;CXP87248A-123Q,100P,QFP,VP-A17	
IC602	1203-001123	IC-VOLTAGE REGULATOR;8420,SOP,8P,216MIL,PLASTIC,	
IC603	AC14-12012T	IC-OP AMP;TA75S01F(TE85L),QFP,-	
IC604	AC14-12012T	IC-OP AMP;TA75S01F(TE85L),QFP,-	
IC605	1102-001043	IC-EPROM;29194,1KX16BIT,SOP,8P,150MIL,2	
L501	2703-000388	INDUCTOR-SMD;470UH,5%,3.2X2.5X2.2MM	
L601	2703-000399	INDUCTOR-SMD;100UH,10%,3.2X2.5X2.2MM	
L602	2703-000399	INDUCTOR-SMD;100UH,10%,3.2X2.5X2.2MM	
L603	2703-000399	INDUCTOR-SMD;100UH,10%,3.2X2.5X2.2MM	
Q501	0504-000110	TR-DIGITAL;DTC114,NPN,200MW,10K-10K,SC-70	

Loc. No	New Part No	Description and Specification	Remark
Q502	0504-000105	TR-DIGITAL;DTA114EU,PNP,200MW,10K-10K,SC-	
Q503	0506-000150	TR-ARRAY;UMX2N,NPN,2,50V,40V,100MA,300M	
Q601	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
R501	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R502	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R503	2007-000092	R-CHIP;15KOHM,5%,1/16W,DA,TP,1608	
R504	2007-000091	R-CHIP;12KOHM,5%,1/16W,DA,TP,1608	
R505	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R506	2007-000065	R-CHIP;2.2MOHM,5%,1/16W,DA,TP,1608	
R507	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R508	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R509	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R510	2007-000098	R-CHIP;56KOHM,5%,1/16W,DA,TP,1608	
R511	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
R512	2007-001114	R-CHIP;680KOHM,5%,1/16W,DA,TP,1608	
R513	2007-000123	R-CHIP;1.5KOHM,5%,1/16W,DA,TP,1608	
R514	2007-000123	R-CHIP;1.5KOHM,5%,1/16W,DA,TP,1608	
R515	2007-000092	R-CHIP;15KOHM,5%,1/16W,DA,TP,1608	
R516	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R517	2007-000123	R-CHIP;1.5KOHM,5%,1/16W,DA,TP,1608	
R518	2007-000076	R-CHIP;330OHM,5%,1/16W,DA,TP,1608	
R519	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R520	2007-000458	R-CHIP;18KOHM,5%,1/16W,DA,TP,1608	
R521	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
R522	2007-000122	R-CHIP;1.2KOHM,5%,1/16W,DA,TP,1608	
R523	2007-000123	R-CHIP;1.5KOHM,5%,1/16W,DA,TP,1608	
R524	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
R528	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
R529	2007-000106	R-CHIP;220KOHM,5%,1/16W,DA,TP,1608	
R530	2007-000130	R-CHIP;39KOHM,5%,1/16W,DA,TP,1608	
R531	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
R532	2007-000483	R-CHIP;1OHM,5%,1/10W,DA,TP,2012	
R533	2007-000483	R-CHIP;1OHM,5%,1/10W,DA,TP,2012	
R534	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
R537	2007-000130	R-CHIP;39KOHM,5%,1/16W,DA,TP,1608	
R538	2007-000503	R-CHIP;2.2OHM,5%,1/16W,DA,TP,1608	
R539	2007-000503	R-CHIP;2.2OHM,5%,1/16W,DA,TP,1608	
R540	2007-000503	R-CHIP;2.2OHM,5%,1/16W,DA,TP,1608	
R541	2007-000077	R-CHIP;470OHM,5%,1/16W,DA,TP,1608	
R543	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R544	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R545	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R546	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
R547	2007-000079	R-CHIP;1.8KOHM,5%,1/16W,DA,TP,1608	
R548	2007-000081	R-CHIP;2.7KOHM,5%,1/16W,DA,TP,1608	
R549	2007-000119	R-CHIP;560OHM,5%,1/16W,DA,TP,1608	
R550	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
R551	2007-000458	R-CHIP;18KOHM,5%,1/16W,DA,TP,1608	
R552	2007-000075	R-CHIP;220OHM,5%,1/16W,DA,TP,1608	
R553	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
R601	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R602	2007-000267	R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012	
R603	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R604	2007-001700	R-CHIP;330KOHM,0.5%,1/16W,DA,TP,1608	
R605	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	

Loc. No	New Part No	Description and Specification	Remark
R606	2007-001693	R-CHIP;15KOHM,0.5%,1/16W,DA,TP,1608	
R607	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R608	2007-001700	R-CHIP;330KOHM,0.5%,1/16W,DA,TP,1608	
R609	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R610	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R611	2007-000106	R-CHIP;220KOHM,5%,1/16W,DA,TP,1608	
R613	2007-000106	R-CHIP;220KOHM,5%,1/16W,DA,TP,1608	
R614	2007-000106	R-CHIP;220KOHM,5%,1/16W,DA,TP,1608	
R615	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R616	2007-000106	R-CHIP;220KOHM,5%,1/16W,DA,TP,1608	
R617	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R618	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R619	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R620	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R621	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R622	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R623	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R624	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R625	2007-000293	R-CHIP;100OHM,5%,1/8W,DA,TP,3216	
R626	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R627	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R628	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R629	2007-000583	R-CHIP;22KOHM,1%,1/16W,DA,TP,1608	
R630	2007-000583	R-CHIP;22KOHM,1%,1/16W,DA,TP,1608	
R631	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R632	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R633	2007-000123	R-CHIP;1.5KOHM,5%,1/16W,DA,TP,1608	
R634	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R635	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R636	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R637	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R638	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R639	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R641	2007-001643	R-CHIP;100KOHM,0.5%,1/16W,DA,TP,1608	
R642	2007-001644	R-CHIP;10KOHM,0.5%,1/16W,DA,TP,1608	
R643	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R644	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R645	2007-000077	R-CHIP;470OHM,5%,1/16W,DA,TP,1608	
R646	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R647	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R649	2007-000074	R-CHIP;100OHM,5%,1/16W,DA,TP,1608	
R650	2007-000074	R-CHIP;100OHM,5%,1/16W,DA,TP,1608	
R651	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R652	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R653	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R654	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
R655	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R656	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R657	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R658	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R659	2007-000082	R-CHIP;3.3KOHM,5%,1/16W,DA,TP,1608	
R660	2007-000087	R-CHIP;6.8KOHM,5%,1/16W,DA,TP,1608	
R661	2007-000065	R-CHIP;2.2MOHM,5%,1/16W,DA,TP,1608	
R664	2007-000106	R-CHIP;220KOHM,5%,1/16W,DA,TP,1608	
R665	2007-001643	R-CHIP;100KOHM,0.5%,1/16W,DA,TP,1608	

Loc. No	New Part No	Description and Specification	Remark
R666	2007-001643	R-CHIP;100KOHM,0.5%,1/16W,DA,TP,1608	
R667	2007-001643	R-CHIP;100KOHM,0.5%,1/16W,DA,TP,1608	
R668	2007-001643	R-CHIP;100KOHM,0.5%,1/16W,DA,TP,1608	
R670	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R671	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R672	2007-000087	R-CHIP;6.8KOHM,5%,1/16W,DA,TP,1608	
R673	2007-000082	R-CHIP;3.3KOHM,5%,1/16W,DA,TP,1608	
R674	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R675	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R676	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R677	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R678	2007-000076	R-CHIP;330OHM,5%,1/16W,DA,TP,1608	
SW601	3408-000297	SWITCH-SLIDE;5V,1A,-,-	
XT601	2801-001449	CRYSTAL-SMD;32.768KHZ,20PPM,28-AAW,12.5PF,	
XT602	2801-003239	CRYSTAL-SMD;11.71875MHZ,50PPM,28-ABL,13PF,	
VIDEO PARTS			
C101	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C102	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C103	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	
C104	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C105	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C106	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C107	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	
C108	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C109	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C110	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C111	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C112	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C113	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C114	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C115	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C116	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C117	2203-001609	C-CERAMIC,CHIP;22NF,10%,16V,X7R,1608,1.6MM,TP	
C118	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C119	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	
C120	2203-000357	C-CERAMIC,CHIP;150PF,5%,50V,CH,1608,-,TP	
C121	2203-001686	C-CERAMIC,CHIP;75PF,5%,50V,CH,1608,1.6MM,TP	
C123	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C124	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C125	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C151	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C152	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C153	2203-002220	C-CERAMIC,CHIP;56PF,0.05,50V,CH,1608,-,TP	
C154	2203-001676	C-CERAMIC,CHIP;62PF,5%,50V,CH,1608,1.6MM,TP	
C155	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C156	2203-000491	C-CERAMIC,CHIP;2.2NF,10%,50V,X7R,1608,-,TP	
C157	2203-001616	C-CERAMIC,CHIP;270PF,5%,50V,CH,1608,1.6MM,TP	
C158	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C159	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C160	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C161	2203-000626	C-CERAMIC,CHIP;22PF,5%,50V,CH,1608,-,TP	
C162	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C163	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C164	2203-000626	C-CERAMIC,CHIP;22PF,5%,50V,CH,1608,-,TP	

Loc. No	New Part No	Description and Specification	Remark
C165	2203-001588	C-CERAMIC,CHIP;18PF,5%,50V,CH,1608,1.6MM,TP	
C166	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C167	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C171	2007-000082	R-CHIP;3.3KOHM,5%,1/16W,DA,TP,1608	
C201	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C202	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C203	2404-000179	C-TA,CHIP;220NF,20%,35V,-,3216,-,TP	
C204	2402-001008	C-AL,SMD;220UF,20%,4V,-,6.6X6.6X5.4MM,2	
C205	2404-000232	C-TA,CHIP;4.7UF,20%,10V,-,3216,-,TP	
C206	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C207	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C208	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C209	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C210	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C211	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C212	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C213	2404-000151	C-TA,CHIP;1UF,20%,16V,-,3216,-,TP	
C214	2203-001103	C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,1608,-,TP	
C215	2203-001609	C-CERAMIC,CHIP;22NF,10%,16V,X7R,1608,1.6MM,TP	
C216	2404-000261	C-TA,CHIP;680NF,20%,20V,-,3216,-,TP	
C217	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C218	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C220	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C221	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C223	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C224	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C225	2203-001640	C-CERAMIC,CHIP;390PF,10%,50V,X7R,1608,1.6MM,T	
C226	2203-001632	C-CERAMIC,CHIP;330PF,5%,50V,CH,1608,1.6MM,TP	
C227	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C228	2203-001607	C-CERAMIC,CHIP;220PF,5%,50V,CH,1608,1.6MM,TP	
C229	2203-001607	C-CERAMIC,CHIP;220PF,5%,50V,CH,1608,1.6MM,TP	
C230	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C232	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C233	2404-000232	C-TA,CHIP;4.7UF,20%,10V,-,3216,-,TP	
C234	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C235	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C236	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C237	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C238	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C239	2203-001585	C-CERAMIC,CHIP;180PF,5%,50V,CH,1608,1.6MM,TP	
C240	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C241	2203-001676	C-CERAMIC,CHIP;62PF,5%,50V,CH,1608,1.6MM,TP	
C242	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C243	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C244	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C245	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C246	2404-000175	C-TA,CHIP;2.2UF,20%,6.3V,-,3216,1.1MM,TP	
C247	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C248	2404-000175	C-TA,CHIP;2.2UF,20%,6.3V,-,3216,1.1MM,TP	
C249	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C250	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C251	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C252	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C253	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C254	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	

Loc. No	New Part No	Description and Specification	Remark
C255	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C257	2203-001657	C-CERAMIC,CHIP;47NF,+80-20%,16V,Y5V,1608,1.6M	
C258	2203-001658	C-CERAMIC,CHIP;47PF,5%,50V,CH,1608,1.6MM,TP	
C259	2203-001656	C-CERAMIC,CHIP;470PF,5%,50V,CH,1608,1.6MM,TP	
C261	2203-000626	C-CERAMIC,CHIP;22PF,5%,50V,CH,1608,-,TP	
C271	2203-001658	C-CERAMIC,CHIP;47PF,5%,50V,CH,1608,1.6MM,TP	
C272	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C273	2203-000357	C-CERAMIC,CHIP;150PF,5%,50V,CH,1608,-,TP	
C274	2203-001568	C-CERAMIC,CHIP;110PF,5%,50V,CH,1608,1.6MM,TP	
C275	2203-001588	C-CERAMIC,CHIP;18PF,5%,50V,CH,1608,1.6MM,TP	
C276	2203-000851	C-CERAMIC,CHIP;39PF,5%,50V,CH,1608,-,TP	
C278	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C301	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C302	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C304	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C306	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C307	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C308	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
C309	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
C310	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C311	2203-001618	C-CERAMIC,CHIP;27PF,5%,50V,CH,1608,1.6MM,TP	
C312	2203-000626	C-CERAMIC,CHIP;22PF,5%,50V,CH,1608,-,TP	
C313	2203-001658	C-CERAMIC,CHIP;47PF,5%,50V,CH,1608,1.6MM,TP	
C314	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	
C315	2203-000626	C-CERAMIC,CHIP;22PF,5%,50V,CH,1608,-,TP	
C316	2203-001658	C-CERAMIC,CHIP;47PF,5%,50V,CH,1608,1.6MM,TP	
C317	2203-001683	C-CERAMIC,CHIP;68PF,5%,50V,CH,1608,1.6MM,TP	
C318	2203-001658	C-CERAMIC,CHIP;47PF,5%,50V,CH,1608,1.6MM,TP	
C319	2203-001567	C-CERAMIC,CHIP;10PF,0.5PF,50V,CH,1608,1.6MM,T	
C320	2203-001567	C-CERAMIC,CHIP;10PF,0.5PF,50V,CH,1608,1.6MM,T	
C321	2203-001588	C-CERAMIC,CHIP;18PF,5%,50V,CH,1608,1.6MM,TP	
C322	2203-001618	C-CERAMIC,CHIP;27PF,5%,50V,CH,1608,1.6MM,TP	
C323	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	
C324	2203-001618	C-CERAMIC,CHIP;27PF,5%,50V,CH,1608,1.6MM,TP	
C325	2203-000357	C-CERAMIC,CHIP;150PF,5%,50V,CH,1608,-,TP	
C351	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C352	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C353	2203-001568	C-CERAMIC,CHIP;110PF,5%,50V,CH,1608,1.6MM,TP	
C354	2404-000232	C-TA,CHIP;4.7UF,20%,10V,-,3216,-,TP	
C355	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
C356	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
C357	2203-001640	C-CERAMIC,CHIP;390PF,10%,50V,X7R,1608,1.6MM,T	
C358	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C359	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
C360	2203-001402	C-CERAMIC,CHIP;220NF,+80-20%,16V,Y5V,1608,1.6	
C361	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C362	2203-001567	C-CERAMIC,CHIP;10PF,0.5PF,50V,CH,1608,1.6MM,T	
C363	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C381	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
C401	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C402	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C403	2203-001567	C-CERAMIC,CHIP;10PF,0.5PF,50V,CH,1608,1.6MM,T	
C404	2203-001699	C-CERAMIC,CHIP;8PF,0.5PF,50V,CH,1608,1.6MM,TP	
C405	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C406	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	

Loc. No	New Part No	Description and Specification	Remark
C407	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C408	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CN101	AC41-22065A	FPC-CONNECTOR;00-6200-511-130-000,-,-,-	
CN301	3708-001140	CONNECTOR-FPC/FC/PIC;12P,0.8MM,SMD-A,SN	
CN302	3711-003115	CONNECTOR-HEADER;BOX,12P,2R,0.8MM,SMD-S,AU20U	
D151	0407-000145	DIODE-ARRAY;DCC010,-80V,100MA,C2-3,SOT-23,	
D201	0407-000115	DIODE-ARRAY;DAN202U,80V,100MA,CA2-3,SC-70,	
D202	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
D203	0407-000102	DIODE-ARRAY;DA204U,20V,100MA,C2-3,SC-70,TP	
D351	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
D381	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
D401	0407-000115	DIODE-ARRAY;DAN202U,80V,100MA,CA2-3,SC-70,	
D402	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
D404	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
IC101	1201-001087	IC-PREAMP;52369,QFP,48P,-,SINGLE,-,PLAST	
IC201	AC14-12012G	IC;CXA1700R,QFP,-	
IC202	1201-001083	IC-AGC AMP;1211,SOP,8P,225MIL,DUAL,5DB,PL	
IC302	1209-001044	IC-DELAY LINE;CXL5517N,SOP,20P,173MIL,PLASTI	
IC351	AC14-12012S	IC;M52358VP,SOP,-	
IC401	1204-001146	IC-OSD PROCESSOR;BU6251FV,SOP,20P,240MIL,PLASTI	
IC402	AC14-12015G	IC-LINEAR;NJM2249V,SSOP,TAPE	
IC431	1002-001034	IC-D/A CONVERTER;M62352P,8BIT,SOP,20P,-,+-1.5LS	
L101	2703-000399	INDUCTOR-SMD;100UH,10%,3.2X2.5X2.2MM	
L102	2703-000397	INDUCTOR-SMD;33UH,10%,2.5X2X1.8MM	
L103	2703-000363	INDUCTOR-SMD;10UH,5%,2.5X2X1.8MM	
L151	2703-000381	INDUCTOR-SMD;180UH,5%,3.2X2.5X2.2MM	
L152	2703-000381	INDUCTOR-SMD;180UH,5%,3.2X2.5X2.2MM	
L153	2703-000388	INDUCTOR-SMD;470UH,5%,3.2X2.5X2.2MM	
L154	2703-000381	INDUCTOR-SMD;180UH,5%,3.2X2.5X2.2MM	
L155	2703-000367	INDUCTOR-SMD;33UH,5%,2.5X2X1.8MM	
L156	2703-000363	INDUCTOR-SMD;10UH,5%,2.5X2X1.8MM	
L201	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
L202	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
L205	2703-000366	INDUCTOR-SMD;22UH,5%,2.5X2X1.8MM	
L206	2703-000397	INDUCTOR-SMD;33UH,10%,2.5X2X1.8MM	
L208	2703-000366	INDUCTOR-SMD;22UH,5%,2.5X2X1.8MM	
L271	2703-000376	INDUCTOR-SMD;8.2UH,5%,2.5X2X1.8MM	
L272	2703-000385	INDUCTOR-SMD;330UH,5%,3.2X2.5X2.2MM	
L273	2703-000364	INDUCTOR-SMD;100UH,5%,2.5X2X1.8MM	
L301	2703-000397	INDUCTOR-SMD;33UH,10%,2.5X2X1.8MM	
L302	2703-000397	INDUCTOR-SMD;33UH,10%,2.5X2X1.8MM	
L303	2703-000371	INDUCTOR-SMD;4.7UH,5%,2.5X2X1.8MM	
L304	2703-000371	INDUCTOR-SMD;4.7UH,5%,2.5X2X1.8MM	
L305	2703-000367	INDUCTOR-SMD;33UH,5%,2.5X2X1.8MM	
L306	2703-000367	INDUCTOR-SMD;33UH,5%,2.5X2X1.8MM	
L307	2703-000363	INDUCTOR-SMD;10UH,5%,2.5X2X1.8MM	
L351	2703-000397	INDUCTOR-SMD;33UH,10%,2.5X2X1.8MM	
L401	2703-000397	INDUCTOR-SMD;33UH,10%,2.5X2X1.8MM	
L402	2703-000226	INDUCTOR-SMD;56UH,5%,2.5X3.2X2.2MM	
L431	2703-000397	INDUCTOR-SMD;33UH,10%,2.5X2X1.8MM	
Q101	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q102	0506-000148	TR-ARRAY;UMT2N,PNP,2,-50V,-40V,-100MA,3	
Q151	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q152	0506-000151	TR-ARRAY;UMZ1N,NPN/PNP,1,50V,40V,100MA,	
Q153	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	

Loc. No	New Part No	Description and Specification	Remark
Q154	0501-000207	TR-SMALL SIGNAL;2SC3142,NPN,150MW,SOT-23,TP,40	
Q155	0504-000107	TR-DIGITAL;DTA144EU,PNP,200MW,47K-47K,SC-	
Q156	0506-000150	TR-ARRAY;UMX2N,NPN,2,50V,40V,100MA,300M	
Q202	0506-000151	TR-ARRAY;UMZ1N,NPN/PNP,1,50V,40V,100MA,	
Q203	0506-000150	TR-ARRAY;UMX2N,NPN,2,50V,40V,100MA,300M	
Q205	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q207	0506-000150	TR-ARRAY;UMX2N,NPN,2,50V,40V,100MA,300M	
Q208	0506-000150	TR-ARRAY;UMX2N,NPN,2,50V,40V,100MA,300M	
Q209	0504-000113	TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
Q210	0501-000162	TR-SMALL SIGNAL;2SA1576,PNP,200MW,SC-70,TP,180	
Q211	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q212	0504-000110	TR-DIGITAL;DTC114,NPN,200MW,10K-10K,SC-70	
Q213	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q214	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q215	0506-000151	TR-ARRAY;UMZ1N,NPN/PNP,1,50V,40V,100MA,	
Q216	0501-000162	TR-SMALL SIGNAL;2SA1576,PNP,200MW,SC-70,TP,180	
Q217	0504-000113	TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
Q218	0504-000177	TR-DIGITAL;DTC143EUA,NPN,200MW,4.7K-4.7K,	
Q219	0504-000105	TR-DIGITAL;DTA114EU,PNP,200MW,10K-10K,SC-	
Q220	0504-000113	TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
Q222	0504-000113	TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
Q271	0506-000150	TR-ARRAY;UMX2N,NPN,2,50V,40V,100MA,300M	
Q301	0501-000162	TR-SMALL SIGNAL;2SA1576,PNP,200MW,SC-70,TP,180	
Q302	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q303	0504-000107	TR-DIGITAL;DTA144EU,PNP,200MW,47K-47K,SC-	
Q304	0506-000150	TR-ARRAY;UMX2N,NPN,2,50V,40V,100MA,300M	
Q305	0506-000150	TR-ARRAY;UMX2N,NPN,2,50V,40V,100MA,300M	
Q306	0506-000150	TR-ARRAY;UMX2N,NPN,2,50V,40V,100MA,300M	
Q351	0506-000146	TR-ARRAY;UMH6N,NPN,2,150MW,UM6,TP,68	
Q352	0504-000107	TR-DIGITAL;DTA144EU,PNP,200MW,47K-47K,SC-	
Q353	0506-000146	TR-ARRAY;UMH6N,NPN,2,150MW,UM6,TP,68	
Q354	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q355	0504-000107	TR-DIGITAL;DTA144EU,PNP,200MW,47K-47K,SC-	
Q381	0501-000162	TR-SMALL SIGNAL;2SA1576,PNP,200MW,SC-70,TP,180	
Q382	0504-000113	TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
R101	2007-000450	R-CHIP;180OHM,5%,1/16W,DA,TP,1608	
R102	2007-000118	R-CHIP;390OHM,5%,1/16W,DA,TP,1608	
R103	2007-000076	R-CHIP;330OHM,5%,1/16W,DA,TP,1608	
R104	2007-000450	R-CHIP;180OHM,5%,1/16W,DA,TP,1608	
R105	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
R106	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R107	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R108	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R109	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R114	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R115	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R116	2007-000079	R-CHIP;1.8KOHM,5%,1/16W,DA,TP,1608	
R117	2007-000099	R-CHIP;62KOHM,5%,1/16W,DA,TP,1608	
R118	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
R119	2007-000082	R-CHIP;3.3KOHM,5%,1/16W,DA,TP,1608	
R120	2007-000071	R-CHIP;22OHM,5%,1/16W,DA,TP,1608	
R121	2007-000643	R-CHIP;270OHM,5%,1/16W,DA,TP,1608	
R122	2007-000075	R-CHIP;220OHM,5%,1/16W,DA,TP,1608	
R123	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
R124	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	

Loc. No	New Part No	Description and Specification	Remark
R125	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R126	2007-000120	R-CHIP;680OHM,5%,1/16W,DA,TP,1608	
R151	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
R152	2007-000092	R-CHIP;15KOHM,5%,1/16W,DA,TP,1608	
R153	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R154	2007-000077	R-CHIP;470OHM,5%,1/16W,DA,TP,1608	
R155	2007-000076	R-CHIP;330OHM,5%,1/16W,DA,TP,1608	
R156	2007-000098	R-CHIP;56KOHM,5%,1/16W,DA,TP,1608	
R157	2007-000082	R-CHIP;3.3KOHM,5%,1/16W,DA,TP,1608	
R158	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R159	2007-000119	R-CHIP;560OHM,5%,1/16W,DA,TP,1608	
R160	2007-000079	R-CHIP;1.8KOHM,5%,1/16W,DA,TP,1608	
R161	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R162	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R163	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
R164	2007-000120	R-CHIP;680OHM,5%,1/16W,DA,TP,1608	
R165	2007-000450	R-CHIP;180OHM,5%,1/16W,DA,TP,1608	
R166	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R167	2007-000077	R-CHIP;470OHM,5%,1/16W,DA,TP,1608	
R168	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R169	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
R170	2007-000643	R-CHIP;270OHM,5%,1/16W,DA,TP,1608	
R172	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R173	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
R174	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R175	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
R176	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
R177	2007-000079	R-CHIP;1.8KOHM,5%,1/16W,DA,TP,1608	
R201	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R202	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R203	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R204	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R205	2007-000839	R-CHIP;39OHM,5%,1/16W,DA,TP,1608	
R206	2007-000839	R-CHIP;39OHM,5%,1/16W,DA,TP,1608	
R207	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
R208	2007-000123	R-CHIP;1.5KOHM,5%,1/16W,DA,TP,1608	
R209	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R210	2007-000120	R-CHIP;680OHM,5%,1/16W,DA,TP,1608	
R211	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R212	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R213	2007-000043	R-CHIP;1KOHM,1%,1/16W,DA,TP,1608	
R214	2007-000043	R-CHIP;1KOHM,1%,1/16W,DA,TP,1608	
R215	2007-000965	R-CHIP;5.1KOHM,5%,1/16W,DA,TP,1608	
R216	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R217	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
R218	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
R219	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
R220	2007-000125	R-CHIP;3.9KOHM,5%,1/16W,DA,TP,1608	
R221	2007-000086	R-CHIP;5.6KOHM,5%,1/16W,DA,TP,1608	
R222	2007-000458	R-CHIP;18KOHM,5%,1/16W,DA,TP,1608	
R223	2007-000086	R-CHIP;5.6KOHM,5%,1/16W,DA,TP,1608	
R224	2007-001179	R-CHIP;8.2KOHM,5%,1/16W,DA,TP,1608	
R226	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
R228	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
R229	2007-000219	R-CHIP;1.2KOHM,1%,1/16W,DA,TP,1608	

Loc. No	New Part No	Description and Specification	Remark
R230	2007-000999	R-CHIP;510OHM,1%,1/16W,DA,TP,1608	
R231	2007-000683	R-CHIP;3.3KOHM,1%,1/16W,DA,TP,1608	
R232	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R233	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
R234	2007-000121	R-CHIP;820OHM,5%,1/16W,DA,TP,1608	
R235	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R236	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R237	2007-000118	R-CHIP;390OHM,5%,1/16W,DA,TP,1608	
R238	2007-000120	R-CHIP;680OHM,5%,1/16W,DA,TP,1608	
R239	2007-000120	R-CHIP;680OHM,5%,1/16W,DA,TP,1608	
R240	2007-000122	R-CHIP;1.2KOHM,5%,1/16W,DA,TP,1608	
R241	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R242	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R243	2007-000123	R-CHIP;1.5KOHM,5%,1/16W,DA,TP,1608	
R244	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R245	2007-000122	R-CHIP;1.2KOHM,5%,1/16W,DA,TP,1608	
R246	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R247	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R248	2007-000092	R-CHIP;15KOHM,5%,1/16W,DA,TP,1608	
R251	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R255	2007-000123	R-CHIP;1.5KOHM,5%,1/16W,DA,TP,1608	
R256	2007-000116	R-CHIP;120OHM,5%,1/16W,DA,TP,1608	
R257	2007-000074	R-CHIP;100OHM,5%,1/16W,DA,TP,1608	
R258	2007-000123	R-CHIP;1.5KOHM,5%,1/16W,DA,TP,1608	
R259	2007-000121	R-CHIP;820OHM,5%,1/16W,DA,TP,1608	
R260	2007-000121	R-CHIP;820OHM,5%,1/16W,DA,TP,1608	
R261	2007-000086	R-CHIP;5.6KOHM,5%,1/16W,DA,TP,1608	
R262	2007-000079	R-CHIP;1.8KOHM,5%,1/16W,DA,TP,1608	
R263	2007-000119	R-CHIP;560OHM,5%,1/16W,DA,TP,1608	
R264	2007-000109	R-CHIP;1MOHM,5%,1/16W,DA,TP,1608	
R271	2007-000120	R-CHIP;680OHM,5%,1/16W,DA,TP,1608	
R272	2007-000119	R-CHIP;560OHM,5%,1/16W,DA,TP,1608	
R273	2007-000119	R-CHIP;560OHM,5%,1/16W,DA,TP,1608	
R274	2007-000091	R-CHIP;12KOHM,5%,1/16W,DA,TP,1608	
R275	2007-000120	R-CHIP;680OHM,5%,1/16W,DA,TP,1608	
R276	2007-000074	R-CHIP;100OHM,5%,1/16W,DA,TP,1608	
R277	2007-000119	R-CHIP;560OHM,5%,1/16W,DA,TP,1608	
R278	2007-000077	R-CHIP;470OHM,5%,1/16W,DA,TP,1608	
R279	2007-000076	R-CHIP;330OHM,5%,1/16W,DA,TP,1608	
R280	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R282	2007-000125	R-CHIP;3.9KOHM,5%,1/16W,DA,TP,1608	
R283	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
R301	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R302	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R303	2007-001026	R-CHIP;560KOHM,5%,1/16W,DA,TP,1608	
R305	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R306	2007-000077	R-CHIP;470OHM,5%,1/16W,DA,TP,1608	
R307	2007-000122	R-CHIP;1.2KOHM,5%,1/16W,DA,TP,1608	
R308	2007-000079	R-CHIP;1.8KOHM,5%,1/16W,DA,TP,1608	
R309	2007-000839	R-CHIP;39OHM,5%,1/16W,DA,TP,1608	
R310	2007-000119	R-CHIP;560OHM,5%,1/16W,DA,TP,1608	
R311	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R312	2007-000121	R-CHIP;820OHM,5%,1/16W,DA,TP,1608	
R313	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R314	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	

Loc. No	New Part No	Description and Specification	Remark
R315	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R316	2007-000120	R-CHIP;680OHM,5%,1/16W,DA,TP,1608	
R317	2007-000512	R-CHIP;2.4KOHM,5%,1/16W,DA,TP,1608	
R318	2007-000077	R-CHIP;470OHM,5%,1/16W,DA,TP,1608	
R319	2007-001134	R-CHIP;68OHM,5%,1/16W,DA,TP,1608	
R320	2007-000643	R-CHIP;270OHM,5%,1/16W,DA,TP,1608	
R321	2007-000075	R-CHIP;220OHM,5%,1/16W,DA,TP,1608	
R322	2007-000120	R-CHIP;680OHM,5%,1/16W,DA,TP,1608	
R323	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R325	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
R327	2007-000116	R-CHIP;120OHM,5%,1/16W,DA,TP,1608	
R328	2007-000101	R-CHIP;82KOHM,5%,1/16W,DA,TP,1608	
R329	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
R330	2007-000119	R-CHIP;560OHM,5%,1/16W,DA,TP,1608	
R351	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R352	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
R353	2007-000082	R-CHIP;3.3KOHM,5%,1/16W,DA,TP,1608	
R354	2007-000091	R-CHIP;12KOHM,5%,1/16W,DA,TP,1608	
R355	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R356	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
R357	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
R358	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R359	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R360	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R361	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
R362	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R363	2007-000121	R-CHIP;820OHM,5%,1/16W,DA,TP,1608	
R364	2007-000122	R-CHIP;1.2KOHM,5%,1/16W,DA,TP,1608	
R365	2007-000122	R-CHIP;1.2KOHM,5%,1/16W,DA,TP,1608	
R366	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R367	2007-000091	R-CHIP;12KOHM,5%,1/16W,DA,TP,1608	
R381	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R382	2007-000695	R-CHIP;3.3OHM,5%,1/16W,DA,TP,1608	
R383	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R384	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R401	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R402	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R403	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R404	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R405	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R406	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R407	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R408	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R409	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R410	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
R411	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R414	2007-000080	R-CHIP;2KOHM,5%,1/16W,DA,TP,1608	
R415	2007-000087	R-CHIP;6.8KOHM,5%,1/16W,DA,TP,1608	
R416	2007-000125	R-CHIP;3.9KOHM,5%,1/16W,DA,TP,1608	
R417	2007-000079	R-CHIP;1.8KOHM,5%,1/16W,DA,TP,1608	
R418	2007-001179	R-CHIP;8.2KOHM,5%,1/16W,DA,TP,1608	
R419	2007-000079	R-CHIP;1.8KOHM,5%,1/16W,DA,TP,1608	
R420	2007-001179	R-CHIP;8.2KOHM,5%,1/16W,DA,TP,1608	
R421	2007-000043	R-CHIP;1KOHM,1%,1/16W,DA,TP,1608	
R422	2007-000839	R-CHIP;39OHM,5%,1/16W,DA,TP,1608	

Loc. No	New Part No	Description and Specification	Remark
R423	2007-000043	R-CHIP;1KOHM,1%,1/16W,DA,TP,1608	
R431	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R432	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R432	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R433	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R434	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
VR301	2104-000122	VR-SMD;500OHM,25%,0.15W,TOP	
X201	2801-003240	CRYSTAL-SMD;4.433619MHZ,20PPM,28-ABN,SERIE	
CAMERA MAIN PARTS			
BP01	AC29-32001B	FILTER-EMI BEAD;CB321611-TA SB 0.2OH,-,-,-	
CNP01	3710-000408	CONNECTOR-SOCKET;40P,2R,0.8MM,-,	
CP01	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
CP03	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP04	2203-001083	C-CERAMIC,CHIP;5PF,0.1PF,50V,NPO,1608,-,TP	
CP05	2203-001083	C-CERAMIC,CHIP;5PF,0.1PF,50V,NPO,1608,-,TP	
CP06	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
CP061	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
CP10	2203-001699	C-CERAMIC,CHIP;8PF,0.5PF,50V,CH,1608,1.6MM,TP	
CP100	2203-000357	C-CERAMIC,CHIP;150PF,5%,50V,CH,1608,-,TP	
CP101	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP102	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP103	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CP104	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP11	2203-001688	C-CERAMIC,CHIP;7PF,0.5PF,50V,CH,1608,1.6MM,TP	
CP111	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
CP112	B1100-0674	C-CERAMIC,CHIP;CK 73 Y5V 16V T 685-Z C3225	
CP115	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP13	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP14	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP15	2404-001039	C-TA,CHIP;47UF,20%,6.3V,-,3528,-,TP	
CP18	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP19	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP20	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP200	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CP21	2404-001039	C-TA,CHIP;47UF,20%,6.3V,-,3528,-,TP	
CP22	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
CP23	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
CP24	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
CP27	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP28	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP31	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
CP32	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP35	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP36	2404-001039	C-TA,CHIP;47UF,20%,6.3V,-,3528,-,TP	
CP37	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP38	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP39	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP41	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP410	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
CP43	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP51	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CP54	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP55	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP56	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	

Loc. No	New Part No	Description and Specification	Remark
CP57	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP58	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP59	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP60	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP61	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP62	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP72	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CP73	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CP74	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP75	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP76	2203-000626	C-CERAMIC,CHIP;22PF,5%,50V,CH,1608,-,TP	
CP77	2203-000626	C-CERAMIC,CHIP;22PF,5%,50V,CH,1608,-,TP	
CP78	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CP79	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP80	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
CP81	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CP82	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP83	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP84	2203-000715	C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,1608,-,TP	
CP85	2203-000715	C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,1608,-,TP	
CP86	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP87	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP88	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CP89	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CP90	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CP91	2203-000715	C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,1608,-,TP	
CP92	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CP93	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP94	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP95	2404-000187	C-TA,CHIP;22UF,20%,10V,-,6032,-,TP	
CP96	2203-000140	C-CERAMIC,CHIP;1.5NF,10%,50V,X7R,1608,-,TP	
CP97	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CP98	2203-001598	C-CERAMIC,CHIP;2.2UF,+80-20%,16V,Y5V,2012,-,T	
CP99	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CS105	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	EIS OPTIOM
CS106	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	EIS OPTIOM
CS108	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	EIS OPTIOM
CS109	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	EIS OPTIOM
CS110	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	EIS OPTIOM
CS111	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	EIS OPTIOM
CS151	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	EIS OPTIOM
CZ090	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	D.ZOOM OPTION
CZ091	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	D.ZOOM OPTION
CZ42	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	D.ZOOM OPTION
CZ63	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	D.ZOOM OPTION
CZ64	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	D.ZOOM OPTION
CZ66	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	D.ZOOM OPTION
CZ67	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	D.ZOOM OPTION
CZ68	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	D.ZOOM OPTION
CZ69	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	D.ZOOM OPTION
CZ71	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	D.ZOOM OPTION
CZ72	2203-001628	C-CERAMIC,CHIP;30PF,5%,50V,CH(VP-A12,VP-A15 ONLY)	D.ZOOM OPTION
	2203-001628	C-CERAMIC,CHIP;30PF,5%,50V,CH(VP-A17,VP-A18 ONLY)	D.ZOOM OPTION
DP01	0405-000151	DIODE-VARACTOR;1T379,30V,10NA,USMD,TP	
DP03	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	

Loc. No	New Part No	Description and Specification	Remark
DP04	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
DP05	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
DP07	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
DP08	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
DP17	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
DP410	0405-000143	DIODE-VARACTOR;MA341,30V,10NA,MINI-2,TP	
DS12	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	EIS OPTION
DS13	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	EIS OPTION
DS14	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	EIS OPTION
DS15	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	EIS OPTION
DS16	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	EIS OPTION
DZ09	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	D.ZOOM OPTION
DZ10	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	D.ZOOM OPTION
DZ11	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	D.ZOOM OPTION
DZ12	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	D.ZOOM OPTION
ICP01	AD14-10001L	IC-LOGIC;KS7213,QFP,80P	
ICP02	AD14-10001M	IC-LINEAR;KA7307,SOP,20P	
ICP04	1201-000200	IC-OP AMP;3414,SOP,8P,173MIL,DUAL,-,PLAS	
ICP06	1002-001033	IC-A/D CONVERTER;AD876JST,10BIT,QFP,48P,-,+-1/2	
ICP08	AD14-10001P	IC-LOGIC;KS7306,QFP,100P	
ICP09	AD11-12001A	IC-ROM;UPD78P018FGC-AB8,OTP,64PIN	
ICP10	AC11-12001G	IC-EEPROM;AT24C02N-10SC,QFP,-	
ICP11	AC14-12009X	IC;MB88346B,VSOP,-	
ICP12	AC14-12008D	IC-LOGIC;MPC17A85ZVM/SC111315,SOP,TAPE	
ICP13	1201-000200	IC-OP AMP;3414,SOP,8P,173MIL,DUAL,-,PLAS	
ICP14	1201-000200	IC-OP AMP;3414,SOP,8P,173MIL,DUAL,-,PLAS	
ICP16	AD14-10001H	IC-REGULATORS;TPS7233Q-PWLE,SSOP,8P	
ICS15	AC09-12014S	IC-MCU;CXP811P24R,QFP,SV-H68	EIS OPTION
ICZ07	AD14-10001N	IC-LOGIC;KS7314X,QFP,80P	D.ZOOM OPTION
LP01	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LP03	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LP04	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LP07	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LP08	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LP09	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LP10	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LP11	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LP12	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LP20	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LS13	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	EIS OPTION
LZ02	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	D.ZOOM OPTION
LZ05	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	D.ZOOM OPTION
QP01	0504-000113	TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
QP02	0504-000113	TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
QP04	0506-000151	TR-ARRAY;UMZ1N,NPN/PNP,1,50V,40V,100MA,	
QP05	0506-000151	TR-ARRAY;UMZ1N,NPN/PNP,1,50V,40V,100MA,	
QP08	0501-000162	TR-SMALL SIGNAL;2SA1576,PNP,200MW,SC-70,TP,180	
QP09	0501-000162	TR-SMALL SIGNAL;2SA1576,PNP,200MW,SC-70,TP,180	
QP12	0501-000162	TR-SMALL SIGNAL;2SA1576,PNP,200MW,SC-70,TP,180	
QP13	0504-000113	TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
QP14	0504-000113	TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
QP16	0506-000138	TR-ARRAY;IMZ1,NPN/PNP,1,50V,40V,100MA,3	
QP17	0506-000138	TR-ARRAY;IMZ1,NPN/PNP,1,50V,40V,100MA,3	
RP01	2007-001442	R-CHIP;10OHM,5%,1/16W,DA,TP,1608	
RP010	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	

Loc. No	New Part No	Description and Specification	Remark
RP02	2007-001442	R-CHIP;10OHM,5%,1/16W,DA,TP,1608	
RP03	2007-001442	R-CHIP;10OHM,5%,1/16W,DA,TP,1608	
RP04	2007-001442	R-CHIP;10OHM,5%,1/16W,DA,TP,1608	
RP05	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP06	2007-001442	R-CHIP;10OHM,5%,1/16W,DA,TP,1608	
RP07	2007-001442	R-CHIP;10OHM,5%,1/16W,DA,TP,1608	
RP08	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RP09	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RP091	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	VP-A12/A15 ONLY
RP092	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	VP-A12/A15 ONLY
RP093	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	VP-A12/A15 ONLY
RP094	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	VP-A12/A15 ONLY
RP095	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	VP-A12/A15 ONLY
RP096	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	VP-A12/A15 ONLY
RP10	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RP100	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RP101	2007-000092	R-CHIP;15KOHM,5%,1/16W,DA,TP,1608	
RP102	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RP103	2007-000092	R-CHIP;15KOHM,5%,1/16W,DA,TP,1608	
RP104	2007-000100	R-CHIP;68KOHM,5%,1/16W,DA,TP,1608	
RP105	2007-000100	R-CHIP;68KOHM,5%,1/16W,DA,TP,1608	
RP106	2007-000863	R-CHIP;4.3OHM,5%,1/10W,DA,TP,2012	
RP107	2007-000863	R-CHIP;4.3OHM,5%,1/10W,DA,TP,2012	
RP108	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP109	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
RP11	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RP110	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
RP112	2007-000458	R-CHIP;18KOHM,5%,1/16W,DA,TP,1608	
RP113	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
RP114	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
RP116	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
RP117	2007-000092	R-CHIP;15KOHM,5%,1/16W,DA,TP,1608	
RP118	2007-000120	R-CHIP;680OHM,5%,1/16W,DA,TP,1608	
RP119	2007-000109	R-CHIP;1MOHM,5%,1/16W,DA,TP,1608	
RP12	2007-000074	R-CHIP;100OHM,5%,1/16W,DA,TP,1608	
RP120	2007-000074	R-CHIP;100OHM,5%,1/16W,DA,TP,1608	
RP121	2007-000512	R-CHIP;2.4KOHM,5%,1/16W,DA,TP,1608	
RP122	2007-000076	R-CHIP;330OHM,5%,1/16W,DA,TP,1608	
RP123	2007-000512	R-CHIP;2.4KOHM,5%,1/16W,DA,TP,1608	
RP124	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP125	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RP126	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP127	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RP128	2007-000075	R-CHIP;220OHM,5%,1/16W,DA,TP,1608	
RP129	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
RP130	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
RP131	2007-001179	R-CHIP;8.2KOHM,5%,1/16W,DA,TP,1608	
RP132	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
RP138	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
RP140	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP15	2007-000074	R-CHIP;100OHM,5%,1/16W,DA,TP,1608	
RP16	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
RP18	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608(VP-A17/A18 ONLY)	EIS OPTION
RP19	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	VP-A12/A15 ONLY
RP200	2011-000770	R-NETWORK;470OHM,5%,1/16W,L,CHIP,8P,TP	

Loc. No	New Part No	Description and Specification	Remark
RP201	2011-000770	R-NETWORK;470OHM,5%,1/16W,L,CHIP,8P,TP	
RP22	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RP23	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RP24	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
RP25	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP26	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP28	2007-001442	R-CHIP;10OHM,5%,1/16W,DA,TP,1608	
RP30	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP300	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP31	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RP38	2007-001179	R-CHIP;8.2KOHM,5%,1/16W,DA,TP,1608	
RP381	2007-000109	R-CHIP;1MOHM,5%,1/16W,DA,TP,1608	
RP39	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
RP40	2007-001038	R-CHIP;56KOHM,1%,1/16W,DA,TP,1608	
RP410	2007-000122	R-CHIP;1.2KOHM,5%,1/16W,DA,TP,1608	
RP43	2007-000250	R-CHIP;1.5MOHM,5%,1/16W,DA,TP,1608	
RP47	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
RP48	2007-000100	R-CHIP;68KOHM,5%,1/16W,DA,TP,1608	
RP49	2007-000100	R-CHIP;68KOHM,5%,1/16W,DA,TP,1608	
RP58	2007-000074	R-CHIP;100OHM,5%,1/16W,DA,TP,1608	
RP59	B1018-0099	R-NETWORK;RN 1/16 FV 8P 101-J T MNR14-J-101 CS96	
RP60	2007-000074	R-CHIP;100OHM,5%,1/16W,DA,TP,1608	
RP61	B1018-0099	R-NETWORK;RN 1/16 FV 8P 101-J T MNR14-J-101 CS96	
RP63	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
RP64	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
RP65	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP650	2007-000828	R-CHIP;39KOHM,1%,1/16W,DA,TP,1608	
RP651	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
RP66	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RP67	2007-000583	R-CHIP;22KOHM,1%,1/16W,DA,TP,1608	
RP69	2007-000772	R-CHIP;33KOHM,1%,1/16W,DA,TP,1608	
RP710	2007-000074	R-CHIP;100OHM,5%,1/16W,DA,TP,1608	
RP73	2007-000583	R-CHIP;22KOHM,1%,1/16W,DA,TP,1608	
RP74	2007-000583	R-CHIP;22KOHM,1%,1/16W,DA,TP,1608	
RP80	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
RP81	2007-000402	R-CHIP;150OHM,5%,1/16W,DA,TP,1608	
RP82	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
RP83	2007-000402	R-CHIP;150OHM,5%,1/16W,DA,TP,1608	
RP84	2007-000450	R-CHIP;180OHM,5%,1/16W,DA,TP,1608	
RP85	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
RP86	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP87	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RP88	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RP89	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP90	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP910	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
RP911	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608(VP-A17/A18 ONLY)	EIS OPTION
RP912	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	VP-A12/A15 ONLY
RP92	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP93	2007-000098	R-CHIP;56KOHM,5%,1/16W,DA,TP,1608	
RP96	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP97	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RP99	2007-000087	R-CHIP;6.8KOHM,5%,1/16W,DA,TP,1608	
RS132	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	EIS OPTION
RS133	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	EIS OPTION

Loc. No	New Part No	Description and Specification	Remark
RS134	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	EIS OPTION
RS135	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	EIS OPTION
RS136	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	EIS OPTION
RS137	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	EIS OPTION
RS50	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	EIS OPTION
RZ75	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	D.ZOOM OPTION
RZ76	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	D.ZOOM OPTION
RZ78	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	D.ZOOM OPTION
RZ781	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	D.ZOOM OPTION
RZ79	2007-000683	R-CHIP;3.3KOHM,1%,1/16W,DA,TP,1608	D.ZOOM OPTION
XP01	2801-001428	CRYSTAL-SMD;28.375MHZ,30PPM,28-ABL,7PF,60O	
XP02	2801-003246	CRYSTAL-SMD;10MHZ,10PPM,28-ABR,12PF,70OHM,	
XP03	2801-003347	CRYSTAL-UNIT;17.734475MHZ,20PPM,28-ABN,8.2P	

181 ASSY-AUDIO BOARD

	AD90-10808V	MONO AUDIO;VP-A12
	AD90-10809B	STEREO AUDIO;VP-A15
	AD90-10806Y	STEREO AUDIO,EIS;VP-A17,VP-A18

AUDIO(MONO) PARTS

C701	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP
C703	2402-001016	C-AL,SMD;33UF,20%,6.3V,-,4.3X4.3X5.8MM,
C704	2402-000187	C-AL,SMD;220NF,20%,50V,-,3X5.5MM,-,TP
C705	2402-000187	C-AL,SMD;220NF,20%,50V,-,3X5.5MM,-,TP
C706	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP
C707	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP
C713	2203-000919	C-CERAMIC,CHIP;470NF,+80-20%,16V,Y5V,2012,-,T
C714	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP
C716	2402-001013	C-AL,SMD;47UF,20%,6.3V,GP,5.3X1.5X5.4,1
C717	2404-000175	C-TA,CHIP;2.2UF,20%,6.3V,-,3216,1.1MM,TP
C718	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP
C719	2402-001010	C-AL,SMD;47UF,20%,16V,GP,6.6X6.6X5.4MM,
C721	2203-000919	C-CERAMIC,CHIP;470NF,+80-20%,16V,Y5V,2012,-,T
C722	2404-000175	C-TA,CHIP;2.2UF,20%,6.3V,-,3216,1.1MM,TP
C727	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP
C728	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP
C729	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP
C731	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP
C733	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP
C734	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP
C736	2404-000216	C-TA,CHIP;3.3UF,20%,6.3V,-,3216,-,TP
C741	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP
C742	2203-000262	C-CERAMIC,CHIP;10NF,10%,50V,X7R,3216,-,TP
C747	2203-000888	C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,1608,-,TP
C750	2402-001016	C-AL,SMD;33UF,20%,6.3V,-,4.3X4.3X5.8MM,
C751	B1106-0204	C-TANTALUM,CHIP;CS 6.3V T 476-J C5846 TCMS0JV476
C755	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP
C756	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP
C757	2402-001016	C-AL,SMD;33UF,20%,6.3V,-,4.3X4.3X5.8MM,
C758	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP
C759	2402-001016	C-AL,SMD;33UF,20%,6.3V,-,4.3X4.3X5.8MM,
C760	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP
CN701	3710-001129	CONNECTOR-SOCKET;40P,2R,0.8MM,SMD-S,SN
CN703	3708-001141	CONNECTOR-FPC/FC/PIC;18P,0.8MM,SMD-A,SN
IC701	1204-000328	IC-AUDIO PROCESSOR;AN3996HFP,SOP,64P,-,PLASTIC,5

Loc. No	New Part No	Description and Specification	Remark
Q703	0506-000143	TR-ARRAY;UMD3N,NPN/PNP,1,50V,40V,100MA,	
Q704	0504-000107	TR-DIGITAL;DTA144EU,PNP,200MW,47K-47K,SC-	
Q707	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q709	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q712	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q720	0504-000110	TR-DIGITAL;DTC114,NPN,200MW,10K-10K,SC-70	
Q721	0504-000110	TR-DIGITAL;DTC114,NPN,200MW,10K-10K,SC-70	
Q722	0504-000105	TR-DIGITAL;DTA114EU,PNP,200MW,10K-10K,SC-	
R700	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
R701	2007-000121	R-CHIP;820OHM,5%,1/16W,DA,TP,1608	
R703	2007-000343	R-CHIP;120OHM,1%,1/16W,DA,TP,1608	
R704	2007-000343	R-CHIP;120OHM,1%,1/16W,DA,TP,1608	
R705	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
R706	2007-000123	R-CHIP;1.5KOHM,5%,1/16W,DA,TP,1608	
R707	2007-000450	R-CHIP;180OHM,5%,1/16W,DA,TP,1608	
R709	2007-000109	R-CHIP;1MOHM,5%,1/16W,DA,TP,1608	
R710	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R714	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R716	2007-000118	R-CHIP;390OHM,5%,1/16W,DA,TP,1608	
R719	2007-000092	R-CHIP;15KOHM,5%,1/16W,DA,TP,1608	
R720	2007-000091	R-CHIP;12KOHM,5%,1/16W,DA,TP,1608	
R723	2007-000132	R-CHIP;180KOHM,5%,1/16W,DA,TP,1608	
R724	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R725	2007-000086	R-CHIP;5.6KOHM,5%,1/16W,DA,TP,1608	
R726	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
R729	2007-000129	R-CHIP;27KOHM,5%,1/16W,DA,TP,1608	
R733	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R735	2007-000081	R-CHIP;2.7KOHM,5%,1/16W,DA,TP,1608	
R736	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
R737	2007-000103	R-CHIP;120KOHM,5%,1/16W,DA,TP,1608	
R740	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R751	2007-000129	R-CHIP;27KOHM,5%,1/16W,DA,TP,1608	
R754	2007-000033	R-CHIP;0OHM,5%,1/8W,DA,TP,3216	
R758	2007-000781	R-CHIP;33OHM,5%,1/10W,DA,TP,2012	
AUDIO(STEREO) PARTS			
C701	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C702	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C703	2402-001016	C-AL,SMD;33UF,20%,6.3V,-,4.3X4.3X5.8MM,	
C704	2402-000187	C-AL,SMD;220NF,20%,50V,-,3X5.5MM,-,TP	
C705	2402-000187	C-AL,SMD;220NF,20%,50V,-,3X5.5MM,-,TP	
C706	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C707	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C708	2402-000187	C-AL,SMD;220NF,20%,50V,-,3X5.5MM,-,TP	
C711	2402-000187	C-AL,SMD;220NF,20%,50V,-,3X5.5MM,-,TP	
C712	2203-000888	C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,1608,-,TP	
C713	2203-000919	C-CERAMIC,CHIP;470NF,+80-20%,16V,Y5V,2012,-,T	
C714	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C716	2402-001013	C-AL,SMD;47UF,20%,6.3V,GP,5.3X1.5X5.4,1	
C717	2404-000175	C-TA,CHIP;2.2UF,20%,6.3V,-,3216,1.1MM,TP	
C718	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C719	2402-001010	C-AL,SMD;47UF,20%,16V,GP,6.6X6.6X5.4MM,	
C721	2203-000919	C-CERAMIC,CHIP;470NF,+80-20%,16V,Y5V,2012,-,T	
C722	2404-000175	C-TA,CHIP;2.2UF,20%,6.3V,-,3216,1.1MM,TP	
C723	2404-000175	C-TA,CHIP;2.2UF,20%,6.3V,-,3216,1.1MM,TP	

Loc. No	New Part No	Description and Specification	Remark
C725	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C726	2203-005127	C-CERAMIC,CHIP;1.5NF,10%,50V,X7R,1608,-,TP	
C727	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C728	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C729	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C731	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C733	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C734	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C736	2404-000175	C-TA,CHIP;2.2UF,20%,6.3V,-,3216,1.1MM,TP	
C737	2404-000175	C-TA,CHIP;2.2UF,20%,6.3V,-,3216,1.1MM,TP	
C738	2203-000919	C-CERAMIC,CHIP;470NF,+80-20%,16V,Y5V,2012,-,T	
C741	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C742	2404-000175	C-TA,CHIP;2.2UF,20%,6.3V,-,3216,1.1MM,TP	
C743	2402-001013	C-AL,SMD;47UF,20%,6.3V,GP,5.3X1.5X5.4,1	
C746	2203-000919	C-CERAMIC,CHIP;470NF,+80-20%,16V,Y5V,2012,-,T	
C747	2203-000888	C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,1608,-,TP	
C750	2402-001016	C-AL,SMD;33UF,20%,6.3V,-,4.3X4.3X5.8MM,	
C751	B1106-0204	C-TANTALUM,CHIP;CS 6.3V T 476-J C5846 TCMS0JV476	
C755	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C756	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C757	2402-001016	C-AL,SMD;33UF,20%,6.3V,-,4.3X4.3X5.8MM,	
C758	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C759	2402-001016	C-AL,SMD;33UF,20%,6.3V,-,4.3X4.3X5.8MM,	
C760	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CN701	3710-001129	CONNECTOR-SOCKET;40P,2R,0.8MM,SMD-S,SN	
CN703	3708-001141	CONNECTOR-FPC/FC/PIC;18P,0.8MM,SMD-A,SN	
IC701	1204-001118	IC-AUDIO PROCESSOR;AN2980FH,QFP,64P,-,PLASTIC,3V	
Q703	0506-000143	TR-ARRAY;UMD3N,NPN/PNP,1,50V,40V,100MA,	
Q704	0504-000107	TR-DIGITAL;DTA144EU,PNP,200MW,47K-47K,SC-	
Q707	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q708	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q709	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q711	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q712	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
Q720	0504-000110	TR-DIGITAL;DTC114,NPN,200MW,10K-10K,SC-70	
Q721	0504-000110	TR-DIGITAL;DTC114,NPN,200MW,10K-10K,SC-70	
Q722	0504-000105	TR-DIGITAL;DTA114EU,PNP,200MW,10K-10K,SC-	
R701	2007-000121	R-CHIP;820OHM,5%,1/16W,DA,TP,1608	
R702	2007-000121	R-CHIP;820OHM,5%,1/16W,DA,TP,1608	
R703	2007-000343	R-CHIP;120OHM,1%,1/16W,DA,TP,1608	
R704	2007-000343	R-CHIP;120OHM,1%,1/16W,DA,TP,1608	
R705	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
R706	2007-000123	R-CHIP;1.5KOHM,5%,1/16W,DA,TP,1608	
R707	2007-000450	R-CHIP;180OHM,5%,1/16W,DA,TP,1608	
R708	2007-000450	R-CHIP;180OHM,5%,1/16W,DA,TP,1608	
R709	2007-000109	R-CHIP;1MOHM,5%,1/16W,DA,TP,1608	
R710	2007-000075	R-CHIP;220OHM,5%,1/16W,DA,TP,1608	
R711	2007-000107	R-CHIP;470KOHM,5%,1/16W,DA,TP,1608	
R712	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
R713	2007-000123	R-CHIP;1.5KOHM,5%,1/16W,DA,TP,1608	
R714	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R716	2007-000450	R-CHIP;180OHM,5%,1/16W,DA,TP,1608	
R717	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
R718	2007-001206	R-CHIP;82KOHM,1%,1/16W,DA,TP,1608	
R719	2007-000092	R-CHIP;15KOHM,5%,1/16W,DA,TP,1608	

Loc. No	New Part No	Description and Specification	Remark
R720	2007-000091	R-CHIP;12KOHM,5%,1/16W,DA,TP,1608	
R721	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R722	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
R723	2007-000103	R-CHIP;120KOHM,5%,1/16W,DA,TP,1608	
R724	2007-000106	R-CHIP;220KOHM,5%,1/16W,DA,TP,1608	
R725	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R726	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
R728	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
R729	2007-000092	R-CHIP;15KOHM,5%,1/16W,DA,TP,1608	
R730	2007-000104	R-CHIP;150KOHM,5%,1/16W,DA,TP,1608	
R732	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R733	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R734	2007-000079	R-CHIP;1.8KOHM,5%,1/16W,DA,TP,1608	
R735	2007-000081	R-CHIP;2.7KOHM,5%,1/16W,DA,TP,1608	
R737	2007-000103	R-CHIP;120KOHM,5%,1/16W,DA,TP,1608	
R739	2007-000106	R-CHIP;220KOHM,5%,1/16W,DA,TP,1608	
R740	2007-000819	R-CHIP;390KOHM,5%,1/16W,DA,TP,1608	
R751	2007-000129	R-CHIP;27KOHM,5%,1/16W,DA,TP,1608	
R752	2007-000129	R-CHIP;27KOHM,5%,1/16W,DA,TP,1608	
R753	2007-000033	R-CHIP;0OHM,5%,1/8W,DA,TP,3216	
R754	2007-000033	R-CHIP;0OHM,5%,1/8W,DA,TP,3216	
R758	2007-000781	R-CHIP;33OHM,5%,1/10W,DA,TP,2012	
EIS PARTS (VP-A17,VP-A18 ONLY)			
CI01	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CI02	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CI03	2203-001402	C-CERAMIC,CHIP;220NF,+80-20%,16V,Y5V,1608,1.6	
CI04	2203-000054	C-CERAMIC,CHIP;15NF,0.1,50V,X7R,1608,-,TP	
CI05	2402-000237	C-AL,SMD;33UF,0.1,10V,GP,5X5.4,1.5MM,TP	
CI06	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CI07	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CI08	2203-001402	C-CERAMIC,CHIP;220NF,+80-20%,16V,Y5V,1608,1.6	
CI09	2203-000054	C-CERAMIC,CHIP;15NF,0.1,50V,X7R,1608,-,TP	
CI10	2402-000237	C-AL,SMD;33UF,0.1,10V,GP,5X5.4,1.5MM,TP	
CI20	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CI21	2203-001630	C-CERAMIC,CHIP;330NF,+80-20%,16V,Y5V,1608,1.6	
CI22	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	
CI26	2203-001630	C-CERAMIC,CHIP;330NF,+80-20%,16V,Y5V,1608,1.6	
CI27	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,CH,1608,1.6MM,TP	
CI41	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CI42	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CI43	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CI44	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CI51	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CI52	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CI53	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CI54	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
ICI01	1201-000203	IC-OP AMP;3414,SOP,8P,300MIL,DUAL,-,PLAS	
ICI02	AD14-10001D	IC-AMP;NJM2902V,SSOP,14P	
ICI03	AC14-12007X	IC-LOGIC;TC4S66F,SSOP-5,5P	
ICI04	AC14-12007X	IC-LOGIC;TC4S66F,SSOP-5,5P	
LI01	2703-000398	INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	
RI01	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
RI02	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
RI03	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	

Loc. No	New Part No	Description and Specification	Remark
RI030	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
RI04	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RI05	2007-000107	R-CHIP;470KOHM,5%,1/16W,DA,TP,1608	
RI06	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
RI07	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
RI08	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
RI09	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RI10	2007-000107	R-CHIP;470KOHM,5%,1/16W,DA,TP,1608	
RI21	2007-000092	R-CHIP;15KOHM,5%,1/16W,DA,TP,1608	
RI22	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RI23	2007-001026	R-CHIP;560KOHM,5%,1/16W,DA,TP,1608	
RI24	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
RI25	2007-000107	R-CHIP;470KOHM,5%,1/16W,DA,TP,1608	
RI26	2007-000092	R-CHIP;15KOHM,5%,1/16W,DA,TP,1608	
RI27	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RI28	2007-001026	R-CHIP;560KOHM,5%,1/16W,DA,TP,1608	
RI29	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
RI30	2007-000107	R-CHIP;470KOHM,5%,1/16W,DA,TP,1608	
RI43	2007-000781	R-CHIP;33OHM,5%,1/10W,DA,TP,2012	
130	**AD90-10809C**	**ASSY-MIC BOARD;MONO VP-A12**	
C720	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C721	2203-000715	C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,1608,-,TP	
C722	2404-000107	C-TA,CHIP;100NF,20%,35V,-,3216,-,TP	
C723	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
C724	2404-000232	C-TA,CHIP;4.7UF,20%,10V,-,3216,-,TP	
C725	2203-001662	C-CERAMIC,CHIP;5.6NF,10%,50V,CH,1608,1.6MM,TP	
C726	B1106-0204	C-TANTALUM,CHIP;CS 6.3V T 476-J C5846 TCMS0JV476	
C733	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
CN722	3708-001132	CONNECTOR-FPC/FC/PIC;15P,0.5MM,SMD-A,SN	
CN723	3711-000456	CONNECTOR-HEADER;3WALL,4P,1R,1.25MM,SMD-S,SN	
JA761	AD37-20001A	JACK-PHONE;HSJ1456-012220,AU	
L702	2703-000397	INDUCTOR-SMD;33UH,10%,2.5X2X1.8MM	
LE761	0601-000208	LED;CHIP,RED,1.5X2MM,660NM	
Q720	0504-000113	TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
Q721	0506-000150	TR-ARRAY;UMX2N,NPN,2,50V,40V,100MA,300M	
Q722	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
R720	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
R721	2007-000100	R-CHIP;68KOHM,5%,1/16W,DA,TP,1608	
R722	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R723	2007-000122	R-CHIP;1.2KOHM,5%,1/16W,DA,TP,1608	
R724	2007-000122	R-CHIP;1.2KOHM,5%,1/16W,DA,TP,1608	
R725	2007-000075	R-CHIP;220OHM,5%,1/16W,DA,TP,1608	
R726	2007-000129	R-CHIP;27KOHM,5%,1/16W,DA,TP,1608	
R727	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
R728	2007-000119	R-CHIP;560OHM,5%,1/16W,DA,TP,1608	
R729	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R730	2007-000072	R-CHIP;47OHM,5%,1/16W,DA,TP,1608	
R731	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R732	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R733	2007-000450	R-CHIP;180OHM,5%,1/16W,DA,TP,1608	
R734	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
R736	2007-000842	R-CHIP;3KOHM,1%,1/16W,DA,TP,1608	
R737	2007-000100	R-CHIP;68KOHM,5%,1/16W,DA,TP,1608	

Loc. No	New Part No	Description and Specification	Remark
R739	2007-000104	R-CHIP;150KOHM,5%,1/16W,DA,TP,1608	
RE761	AD59-60060E	MODULE-REMOCON;DP,PNA4612M00XC,38KHZ,940NM,ME	
130		**ASSY-MIC BOARD**	
	AD90-10809A	STEREO;VP-A15	
	AD90-10805C	STEREO,EIS;VP-A17,VP-A18	
C761	2404-000175	C-TA,CHIP;2.2UF,20%,6.3V,-,3216,1.1MM,TP	
C762	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C763	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C764	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C765	2203-001609	C-CERAMIC,CHIP;22NF,10%,16V,X7R,1608,1.6MM,TP	
C766	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
C767	2203-001634	C-CERAMIC,CHIP;33NF,10%,50V,X7R,1608,-,TP	
C768	2203-001656	C-CERAMIC,CHIP;470PF,5%,50V,CH,1608,1.6MM,TP	
C769	2203-001634	C-CERAMIC,CHIP;33NF,10%,50V,X7R,1608,-,TP	
C770	2203-001143	C-CERAMIC,CHIP;68NF,10%,50V,X7R,1608,2MM,TP	
C771	2203-000140	C-CERAMIC,CHIP;1.5NF,10%,50V,X7R,1608,-,TP	
C772	2203-001609	C-CERAMIC,CHIP;22NF,10%,16V,X7R,1608,1.6MM,TP	
C773	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C774	2203-001634	C-CERAMIC,CHIP;33NF,10%,50V,X7R,1608,-,TP	
C775	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C776	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
C777	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C778	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
C779	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
C780	2203-000440	C-CERAMIC,CHIP;1NF,10%,50V,X7R,1608,-,TP	
C781	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C782	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C783	2203-001634	C-CERAMIC,CHIP;33NF,10%,50V,X7R,1608,-,TP	
C784	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
C785	2203-001143	C-CERAMIC,CHIP;68NF,10%,50V,X7R,1608,2MM,TP	
C786	2203-000140	C-CERAMIC,CHIP;1.5NF,10%,50V,X7R,1608,-,TP	
C787	2203-001609	C-CERAMIC,CHIP;22NF,10%,16V,X7R,1608,1.6MM,TP	
C788	2203-001634	C-CERAMIC,CHIP;33NF,10%,50V,X7R,1608,-,TP	
C789	2203-001634	C-CERAMIC,CHIP;33NF,10%,50V,X7R,1608,-,TP	
C790	2203-001656	C-CERAMIC,CHIP;470PF,5%,50V,CH,1608,1.6MM,TP	
C791	2404-000259	C-TA,CHIP;47UF,20%,6.3V,-,6032,-,TP	
CN761	3708-001132	CONNECTOR-FPC/FC/PIC;15P,0.5MM,SMD-A,SN	
CN763	3711-000456	CONNECTOR-HEADER;3WALL,4P,1R,1.25MM,SMD-S,SN	
GY01	AC39-22018S	SENSOR;-,-,-,ENC-05DA,-	
GY02	AC39-22018T	SENSOR;-,-,-,ENC-05DB,-	
IC761	1201-001108	IC-AUDIO AMP;7471,QFP,36P,-,SINGLE,-,PLASTI	
JA761	AD37-20001A	JACK-PHONE;HSJ1456-012220,AU	
L761	2703-000401	INDUCTOR-SMD;1UH,10%,3.2X2.5X2.2MM	
L762	2703-000401	INDUCTOR-SMD;1UH,10%,3.2X2.5X2.2MM	
L763	2703-000401	INDUCTOR-SMD;1UH,10%,3.2X2.5X2.2MM	
L764	2703-000367	INDUCTOR-SMD;33UH,5%,2.5X2X1.8MM	
LE761	0601-000208	LED;CHIP,RED,1.5X2MM,660NM	
Q761	0504-000113	TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
R760	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R761	2007-000106	R-CHIP;220KOHM,5%,1/16W,DA,TP,1608	
R762	2007-000104	R-CHIP;150KOHM,5%,1/16W,DA,TP,1608	
R763	2007-000104	R-CHIP;150KOHM,5%,1/16W,DA,TP,1608	
R764	2007-000104	R-CHIP;150KOHM,5%,1/16W,DA,TP,1608	

Loc. No	New Part No	Description and Specification	Remark
R765	2007-000129	R-CHIP;27KOHM,5%,1/16W,DA,TP,1608	
R766	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
R767	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
R768	2007-000130	R-CHIP;39KOHM,5%,1/16W,DA,TP,1608	
R769	2007-000099	R-CHIP;62KOHM,5%,1/16W,DA,TP,1608	
R770	2007-000096	R-CHIP;30KOHM,5%,1/16W,DA,TP,1608	
R771	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R772	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R773	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R774	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
R775	2007-000087	R-CHIP;6.8KOHM,5%,1/16W,DA,TP,1608	
R776	2007-000087	R-CHIP;6.8KOHM,5%,1/16W,DA,TP,1608	
R777	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
R778	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
R779	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R780	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
R781	2007-000096	R-CHIP;30KOHM,5%,1/16W,DA,TP,1608	
R782	2007-000099	R-CHIP;62KOHM,5%,1/16W,DA,TP,1608	
R783	2007-000130	R-CHIP;39KOHM,5%,1/16W,DA,TP,1608	
R784	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
R785	2007-000119	R-CHIP;560OHM,5%,1/16W,DA,TP,1608	
R786	2007-000072	R-CHIP;47OHM,5%,1/16W,DA,TP,1608	
R798	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
R799	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
RE761	AD59-60060E	MODULE-REMOCON;DP,PNA4612M00XC,38KHZ,940NM,ME	
187		**ASSY-CCD BOARD**	
	AD90-10812F	VP-A12,VP-A15	
	AD90-10808S	VP-A17,VP-A18	
CD01	2404-000151	C-TA,CHIP;1UF,20%,16V,-,3216,-,TP	
CD04	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CD05	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CD06	2203-000491	C-CERAMIC,CHIP;2.2NF,10%,50V,X7R,1608,-,TP	
CD07	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CD08	2404-000159	C-TA,CHIP;1UF,20%,35V,-,3528,-,TP	
CD09	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CD20	2404-000212	C-TA,CHIP;3.3UF,20%,25V,-,3528,-,TP	
CD21	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CD22	2404-000130	C-TA,CHIP;10UF,20%,20V,-,6032,-,TP	
CD23	2404-000302	C-TA,CHIP;22UF,20%,16V,-,6032,4.4MM,TP	
CD24	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CD25	2404-000208	C-TA,CHIP;3.3UF,20%,16V,-,3528,-,TP	
CD26	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CD27	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CD30	2404-000187	C-TA,CHIP;22UF,20%,10V,-,6032,-,TP	
CD31	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CD32	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CD33	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CD34	2203-000715	C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,1608,-,TP	
CD35	2203-000715	C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,1608,-,TP	
CD36	2203-000715	C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,1608,-,TP	
CD37	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CD38	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CD39	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	

Loc. No	New Part No	Description and Specification	Remark
CND01	3708-001146	CONNECTOR-FPC/FC/PIC;22P,0.5MM,SMD-A,SN	
CND02	B6010-1815	CONNECTOR-WAFER;IL-WAA-40P-HF-HD-A1-E1000 WHT JA	
DD01	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
DD02	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
ICD01	0605-001009	CCD;COLOR,DIP,14,400MIL,320K,7.3X4,VP-A12,VP-A15	
	0605-001005	CCD;COLOR,DIP,14P,400MIL,570K,4.85,VP-A17,VP-A18	
ICD02	1003-001065	IC-CLOCK DRIVER;KS7221D,SOP,20P,225MIL,QUAD,12	
ICD03	AC14-12008D	IC-LOGIC;MPC17A85ZVM/SC111315,SOP,TAPE	
LD20	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LD21	2703-000379	INDUCTOR-SMD;150UH,5%,3.2X2.5X2.2MM	
LD30	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LD31	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
QD01	0505-000180	FET-SILICON;2SK1070,N,-,50MA,-,150MW,SOT-2	
QD43	0504-000113	TR-DIGITAL;DTC144EUA,NPN,200MW,47K-47K,SC	
RD01	2007-000125	R-CHIP;3.9KOHM,5%,1/16W,DA,TP,1608	
RD02	2007-000074	R-CHIP;100OHM,5%,1/16W,DA,TP,1608	
RD03	2007-000109	R-CHIP;1MOHM,5%,1/16W,DA,TP,1608	
RD04	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RD05	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RD30	2007-000100	R-CHIP;68KOHM,5%,1/16W,DA,TP,1608	
RD31	2007-000100	R-CHIP;68KOHM,5%,1/16W,DA,TP,1608	
RD32	2007-000863	R-CHIP;4.3OHM,5%,1/10W,DA,TP,2012	
RD36	2007-000863	R-CHIP;4.3OHM,5%,1/10W,DA,TP,2012	
RD37	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RD46	2007-000076	R-CHIP;330OHM,5%,1/16W,DA,TP,1608	
RD47	2007-000076	R-CHIP;330OHM,5%,1/16W,DA,TP,1608	
161	**AD59-10402A**	**UNIT-FUNCTION,BLC;A-PJ,BLC ASSY**	
CN802	3711-002162	CONNECTOR-HEADER;3WALL,2P,1R,1.25,STRAIGHT,SN	
R807	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R808	2007-000454	R-CHIP;18KOHM,1%,1/10W,DA,TP,2012	
R809	2007-000771	R-CHIP;33KOHM,1%,1/10W,DA,TP,2012	
R810	2007-000771	R-CHIP;33KOHM,1%,1/10W,DA,TP,2012	
R811	2007-001124	R-CHIP;68KOHM,1%,1/10W,DA,TP,2012	
R812	2007-000277	R-CHIP;100KOHM,1%,1/10W,DA,TP,2012	
R813	2007-000754	R-CHIP;330KOHM,1%,1/10W,DA,TP,2012	
SW808	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW809	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW810	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW811	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW812	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW813	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW814	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
162		**UNIT-FUNCTION,DSE**	
	AD59-10397A	VP-A12,VP-A17	
	AD59-10398A	VP-A15,VP-A18	
C840	2203-001559	C-CERAMIC,CHIP;100PF,5%,50V,NPO,TP,1608,1.6MM	CVF OPTION
CN804	3711-000475	CONNECTOR-HEADER;3WALL,5P,1R,1.25MM,SMD-S,SN	EVF OPTION
CN805	3708-001169	CONNECTOR-FPC/FC/PIC;22P,1MM,SMD-A,SN	
CN806	3708-001134	CONNECTOR-FPC/FC/PIC;11P,0.5MM,SMD-A,SN	
CN807	3708-001130	CONNECTOR-FPC/FC/PIC;12P,0.5MM,SMD-S,SN	CVF OPTION
D801	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	CVF OPTION

Loc. No	New Part No	Description and Specification	Remark
R814	2007-000277	R-CHIP;100KOHM,1%,1/10W,DA,TP,2012	
R815	2007-000454	R-CHIP;18KOHM,1%,1/10W,DA,TP,2012	
R816	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R817	2007-000454	R-CHIP;18KOHM,1%,1/10W,DA,TP,2012	
R818	2007-000771	R-CHIP;33KOHM,1%,1/10W,DA,TP,2012	
R819	2007-000771	R-CHIP;33KOHM,1%,1/10W,DA,TP,2012	
R820	2007-001124	R-CHIP;68KOHM,1%,1/10W,DA,TP,2012	
R821	2007-000277	R-CHIP;100KOHM,1%,1/10W,DA,TP,2012	
R840	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	CVF OPTION
SW815	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW816	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW817	3406-000173	SWITCH-ROTARY;16VDC,100MA,10P10T,5.4MM	
163	**AD59-10403A**	**UNIT-FUNCTION,EAR;A-PJ,EAR ASSY**	
CN808	3711-000475	CONNECTOR-HEADER;3WALL,5P,1R,1.25MM,SMD-S,SN	
PH801	3722-000466	JACK-PHONE;1P/1C,PI3.5,AG,BLK,-	
R822	2007-000771	R-CHIP;33KOHM,1%,1/10W,DA,TP,2012	
R823	2007-000771	R-CHIP;33KOHM,1%,1/10W,DA,TP,2012	
R824	2007-001124	R-CHIP;68KOHM,1%,1/10W,DA,TP,2012	
R825	2007-000277	R-CHIP;100KOHM,1%,1/10W,DA,TP,2012	
SW818	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW819	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW820	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW821	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
		UNIT-FUNCTION,VCR	
CN801	3711-000456	CONNECTOR-HEADER;3WALL,4P,1R,1.25MM,SMD-S,SN	
R801	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
R802	2007-000454	R-CHIP;18KOHM,1%,1/10W,DA,TP,2012	
R803	2007-000771	R-CHIP;33KOHM,1%,1/10W,DA,TP,2012	
R804	2007-000771	R-CHIP;33KOHM,1%,1/10W,DA,TP,2012	
R805	2007-001124	R-CHIP;68KOHM,1%,1/10W,DA,TP,2012	
R806	2007-000277	R-CHIP;100KOHM,1%,1/10W,DA,TP,2012	
SW801	AD34-20100B	SWITCH-MODE;8EA,13MM/6.5MM,REEL,3V	
SW802	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW803	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW804	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW805	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW806	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
SW807	3404-001031	SWITCH-TACT;15V,20MA,100GF,4.9X4.9X1.5MM,S	
205	**AD90-10804X**	**ASSY-EVF;VP-A12,VP-A17**	
632	**AD90-10803R**	**ASSY-EVF BOARD**	
CE01	2203-000308	C-CERAMIC,CHIP;120PF,5%,50V,NPO,1608,-,TP	
CE02	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
CE03	2404-000112	C-TA,CHIP;100UF,20%,6.3V,-,7343,-,TP	
CE04	2203-000888	C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,1608,-,TP	
CE05	2404-000175	C-TA,CHIP;2.2UF,20%,6.3V,-,3216,1.1MM,TP	
CE06	2309-001001	C-FILM,CHIP;100NF,5%,16V,3.2X2.5X2.0MM,-,T	
CE07	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CE08	2404-000128	C-TA,CHIP;10UF,20%,16V,-,6032,-,TP	

Loc. No	New Part No	Description and Specification	Remark
CE09	2203-000357	C-CERAMIC,CHIP;150PF,5%,50V,CH,1608,-,TP	
CE10	2402-000144	C-AL,SMD;3.3UF,20%,50V,GP,4X5.4MM,-,TP	
CE11	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
CE12	2404-000112	C-TA,CHIP;100UF,20%,6.3V,-,7343,-,TP	
CE13	2404-000112	C-TA,CHIP;100UF,20%,6.3V,-,7343,-,TP	
CE14	2404-000112	C-TA,CHIP;100UF,20%,6.3V,-,7343,-,TP	
CE15	2309-000143	C-FILM,CHIP;3.9NF,5%,100V,-,-,TP	
CE16	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CE17	2402-000144	C-AL,SMD;3.3UF,20%,50V,GP,4X5.4MM,-,TP	
CE18	2201-000911	C-CERAMIC,DISC;1.2NF,10%,1KV,Y5P,10X5,5,TP	
CNE01	3711-002612	CONNECTOR-HEADER;3WALL,5P,1R,1.25MM,SMD-S,SN	
CNE02	3711-002173	CONNECTOR-HEADER;BOX,4P,1R,1.5,STRAIGHT,SN	
CNE03	AC03-12001B	SOCKET-CRT;SOCKET FINDER,PI10 40MM,-,-,-	
DE01	0407-000151	DIODE-ARRAY;MA153,40V,100MA,C2-3,SOT-23,TP	
DE02	0401-000173	DIODE-SWITCHING;MA151K,40V,100MA,-,3NS,SOT-23	
DE03	0401-000166	DIODE-SWITCHING;MA158-TX,200V,100MA,-,-,CHIP	
FTB01	AC26-32001B	TRANS-FLYBACK;ECX-C2806D,0.6INCH,4.8V	
ICE01	AC14-12006W	IC-LINEAR;KA7007,SOP,-	
LE01	2703-000409	INDUCTOR-SMD;47UH,10%,3.2X2.5X2.2MM	
LE02	AC27-32001B	COIL-LINEARITY;230UH-15%,PI0.12,T,-,-	
QE01	0501-000674	TR-SMALL SIGNAL;2SA1179,PNP,200MW,SOT-23,TP,90	
QE02	0501-000238	TR-SMALL SIGNAL;2SD968A,NPN,1W,SC-62,-,130-220	
QE03	0501-000674	TR-SMALL SIGNAL;2SA1179,PNP,200MW,SOT-23,TP,90	
QE04	0501-000674	TR-SMALL SIGNAL;2SA1179,PNP,200MW,SOT-23,TP,90	
RE01	2007-000109	R-CHIP;1MOHM,5%,1/16W,DA,TP,1608	
RE02	2007-000113	R-CHIP;33OHM,5%,1/16W,DA,TP,1608	
RE03	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
RE04	2007-000107	R-CHIP;470KOHM,5%,1/16W,DA,TP,1608	
RE05	2007-000102	R-CHIP;100KOHM,5%,1/16W,DA,TP,1608	
RE06	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
RE07	2007-000637	R-CHIP;270KOHM,5%,1/16W,DA,TP,1608	
RE08	2007-000074	R-CHIP;100OHM,5%,1/16W,DA,TP,1608	
RE09	2007-000695	R-CHIP;3.3OHM,5%,1/16W,DA,TP,1608	
RE10	2007-000079	R-CHIP;1.8KOHM,5%,1/16W,DA,TP,1608	
RE11	B1335-0002	THERMISTOR-CHIP;NTC CS 3216 3BH 471KC 470OHM/20D	
RE12	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012	
RE13	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RE14	2007-000081	R-CHIP;2.7KOHM,5%,1/16W,DA,TP,1608	
RE15	2007-000965	R-CHIP;5.1KOHM,5%,1/16W,DA,TP,1608	
RE16	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RE17	2007-001056	R-CHIP;6.2KOHM,5%,1/16W,DA,TP,1608	
RE18	2007-000101	R-CHIP;82KOHM,5%,1/16W,DA,TP,1608	
RE19	2007-001179	R-CHIP;8.2KOHM,5%,1/16W,DA,TP,1608	
RE20	2007-000130	R-CHIP;39KOHM,5%,1/16W,DA,TP,1608	
RE21	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
RE22	2007-000082	R-CHIP;3.3KOHM,5%,1/16W,DA,TP,1608	
RE23	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
RE24	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
RE25	2007-000689	R-CHIP;3.3MOHM,5%,1/10W,DA,TP,2012	
RE26	2007-000689	R-CHIP;3.3MOHM,5%,1/10W,DA,TP,2012	
RE27	2007-000462	R-CHIP;18OHM,5%,1/10W,DA,TP,2012	
RE31	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RE32	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
VRE01	2104-001014	VR-SMD;50KOHM,25%,0.15W,TOP	
VRE02	2104-001013	VR-SMD;220OHM,25%,0.15W,TOP	

Loc. No	New Part No	Description and Specification	Remark
VRE03	2104-000178	VR-SMD;1MOHM,30%,1/20W,TOP	
205	**AD90-10812P**	**ASSY-CVF;VP-A15,VP-A18**	
612	**AD90-10806T**	**ASSY-B/L BOARD**	
CNE01	3711-002172	CONNECTOR-HEADER;BOX,3P,1R,1.5,STRAIGHT,SN	
FLE01	B4158-0033	LAMP;3AE4T4KL0502Y 5V 0.3W WHT	
LE01	AC40-22002F	CONVERTER-COIL;-,-	
QE01	B4054-0053	FET;2SK1474-Z 20W 8A 100V MOS/N-CHANNEL T TL	
613	**AD90-10806U**	**ASSY-CVF BOARD**	
CE01	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
CE02	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CE05	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CE06	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CE07	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CE09	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CE10	2404-000153	C-TA,CHIP;1UF,20%,20V,-,3216,-,TP	
CE11	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CE12	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CE13	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
CE14	2404-000153	C-TA,CHIP;1UF,20%,20V,-,3216,-,TP	
CE15	2404-000153	C-TA,CHIP;1UF,20%,20V,-,3216,-,TP	
CE16	2404-000153	C-TA,CHIP;1UF,20%,20V,-,3216,-,TP	
CE17	2404-000153	C-TA,CHIP;1UF,20%,20V,-,3216,-,TP	
CE18	2203-001636	C-CERAMIC,CHIP;33PF,5%,50V,CH,1608,1.6MM,TP	
CE20	2404-000153	C-TA,CHIP;1UF,20%,20V,-,3216,-,TP	
CE22	2404-000112	C-TA,CHIP;100UF,20%,6.3V,-,7343,-,TP	
CE23	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CE24	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
CE25	2404-000153	C-TA,CHIP;1UF,20%,20V,-,3216,-,TP	
CE26	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
CE27	2203-000491	C-CERAMIC,CHIP;2.2NF,10%,50V,X7R,1608,-,TP	
CE28	2203-001656	C-CERAMIC,CHIP;470PF,5%,50V,CH,1608,1.6MM,TP	
CE29	2203-000715	C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,1608,-,TP	
CE30	2404-000204	C-TA,CHIP;3.3UF,20%,10V,-,3216,-,TP	
CE31	2203-001607	C-CERAMIC,CHIP;220PF,5%,50V,CH,1608,1.6MM,TP	
CE32	2203-001636	C-CERAMIC,CHIP;33PF,5%,50V,CH,1608,1.6MM,TP	
CE33	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CE34	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
CE35	2404-000153	C-TA,CHIP;1UF,20%,20V,-,3216,-,TP	
CE36	2404-000153	C-TA,CHIP;1UF,20%,20V,-,3216,-,TP	
CE37	2203-001556	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,1608,1.6	
CE38	2203-000477	C-CERAMIC,CHIP;1UF,+80-20%,16V,Y5V,2012,-,TP	
CE40	2404-000153	C-TA,CHIP;1UF,20%,20V,-,3216,-,TP	
CE41	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CE42	2404-000198	C-TA,CHIP;22UF,20%,6.3V,-,3528,-,TP	
CE43	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
CE44	2404-000139	C-TA,CHIP;10UF,20%,6.3V,-,3216,-,TP	
CE45	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CE46	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CE47	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	
CE48	2203-000257	C-CERAMIC,CHIP;10NF,10%,50V,X7R,1608,-,TP	

Loc. No	New Part No	Description and Specification	Remark
CNE01	3708-001143	CONNECTOR-FPC/FC/PIC;12P,0.8MM,SMD-A,SN	
CNE02	3708-000514	CONNECTOR-FPC/FC/PIC;16P,0.5MM,SMD-S,SN	
CNE03	3711-002613	CONNECTOR-HEADER;3WALL,3P,1R,1.25MM,SMD-S,SN	
DE02	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
DE03	0401-000170	DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
DE04	0405-000123	DIODE-VARACTOR;1T369,34V,10NA,DSM,TP	
ICE01	1003-000259	IC-LCD DRIVER;CXA1854AR,QFP,64P,-,SINGLE,53M	
ICE02	B4012-0434	IC-LINEAR;MB88E347APFV-EL SSOP TAPE	
ICE03	AD14-10001C	IC-AMP;NJM2904V,SSOP,OP-AMP	
ICE04	B4004-0340	IC-LOGIC;TC7W04FU-TE12L SSOP TAPE 8P	
LE01	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LE02	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LE03	2703-000403	INDUCTOR-SMD;22UH,10%,3.2X2.5X2.2MM	
LE04	2703-000398	INDUCTOR-SMD;10UH,10%,3.2X2.5X2.2MM	
LE06	2703-000363	INDUCTOR-SMD;10UH,5%,2.5X2X1.8MM	
QE01	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
QE02	0504-000211	TR-DIGITAL;DTC143TU,NPN,200MW,4.7K,SC-70,	
QE03	0504-000211	TR-DIGITAL;DTC143TU,NPN,200MW,4.7K,SC-70,	
QE04	0504-000211	TR-DIGITAL;DTC143TU,NPN,200MW,4.7K,SC-70,	
QE05	0506-000138	TR-ARRAY;IMZ1,NPN/PNP,1,50V,40V,100MA,3	
QE06	0501-000218	TR-SMALL SIGNAL;2SC4081,NPN,200MW,SC-70,TP,180	
RE05	2007-000098	R-CHIP;56KOHM,5%,1/16W,DA,TP,1608	
RE06	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
RE07	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
RE08	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
RE09	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	
RE10	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
RE13	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RE14	2007-000100	R-CHIP;68KOHM,5%,1/16W,DA,TP,1608	
RE15	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
RE16	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
RE17	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
RE18	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
RE19	2007-000130	R-CHIP;39KOHM,5%,1/16W,DA,TP,1608	
RE20	2007-000130	R-CHIP;39KOHM,5%,1/16W,DA,TP,1608	
RE21	2007-000133	R-CHIP;330KOHM,5%,1/16W,DA,TP,1608	
RE22	2007-000133	R-CHIP;330KOHM,5%,1/16W,DA,TP,1608	
RE23	2007-000133	R-CHIP;330KOHM,5%,1/16W,DA,TP,1608	
RE24	2007-000129	R-CHIP;27KOHM,5%,1/16W,DA,TP,1608	
RE25	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
RE26	2007-000491	R-CHIP;2.2KOHM,1%,1/16W,DA,TP,1608	
RE27	2007-000643	R-CHIP;270OHM,5%,1/16W,DA,TP,1608	
RE28	2007-000075	R-CHIP;220OHM,5%,1/16W,DA,TP,1608	
RE30	2007-000129	R-CHIP;27KOHM,5%,1/16W,DA,TP,1608	
RE31	2007-000091	R-CHIP;12KOHM,5%,1/16W,DA,TP,1608	
RE32	2007-000091	R-CHIP;12KOHM,5%,1/16W,DA,TP,1608	
RE34	2007-000084	R-CHIP;4.7KOHM,5%,1/16W,DA,TP,1608	
RE35	2007-000239	R-CHIP;1.5KOHM,1%,1/16W,DA,TP,1608	
RE37	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RE38	2007-000124	R-CHIP;2.2KOHM,5%,1/16W,DA,TP,1608	
RE39	2007-000082	R-CHIP;3.3KOHM,5%,1/16W,DA,TP,1608	
RE40	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
RE41	2007-000070	R-CHIP;0OHM,5%,1/16W,DA,TP,1608	
RE42	2007-000091	R-CHIP;12KOHM,5%,1/16W,DA,TP,1608	
RE43	2007-000097	R-CHIP;47KOHM,5%,1/16W,DA,TP,1608	

Loc. No	New Part No	Description and Specification	Remark
RE44	2007-000094	R-CHIP;22KOHM,5%,1/16W,DA,TP,1608	
RE45	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RE46	2007-000134	R-CHIP;33KOHM,5%,1/16W,DA,TP,1608	
RE47	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RE48	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RE49	2007-000091	R-CHIP;12KOHM,5%,1/16W,DA,TP,1608	
RE50	2007-000637	R-CHIP;270KOHM,5%,1/16W,DA,TP,1608	
RE51	2007-000106	R-CHIP;220KOHM,5%,1/16W,DA,TP,1608	
RE52	2007-000091	R-CHIP;12KOHM,5%,1/16W,DA,TP,1608	
RE52	2007-000091	R-CHIP;12KOHM,5%,1/16W,DA,TP,1608	
RE53	2007-000614	R-CHIP;24KOHM,1%,1/16W,DA,TP,1608	
RE54	2007-000455	R-CHIP;18KOHM,1%,1/16W,DA,TP,1608	
RE55	2007-000683	R-CHIP;3.3KOHM,1%,1/16W,DA,TP,1608	
RE56	2007-000614	R-CHIP;24KOHM,1%,1/16W,DA,TP,1608	
RE57	2007-000067	R-CHIP;15KOHM,1%,1/16W,DA,TP,1608	
RE58	2007-000078	R-CHIP;1KOHM,5%,1/16W,DA,TP,1608	
RE59	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RE60	2007-000082	R-CHIP;3.3KOHM,5%,1/16W,DA,TP,1608	
RE60	2007-000082	R-CHIP;3.3KOHM,5%,1/16W,DA,TP,1608	
VRE01	2104-000135	VR-SMD;22KOHM,25%,0.15W,TOP	
XE01	2801-003126	CRYSTAL-SMD;4.433619MHZ,30PPM,28-ABN,16PF,	

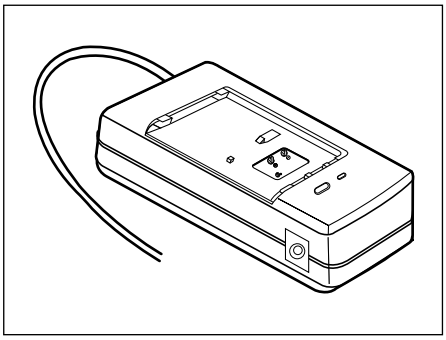
Loc. No	New Part No		Description and Specification	Remark
			ASSY-ACCESSORY	
1			**ADAPTER-AC POWER**	
	AD44-30100J		AA-E4P;SEAU ONLY	
	AD44-30100H		AA-E4P;SEUK(SESC) ONLY	
	AD44-30100D		AA-E4P;ALL BUYER EXCEPT SEAU,SEUK(SESC)	
C10	2306-000298		C-FILM,MPPF;220NF,20%,250V,6.5X5.5X3MM,5MM	
C11	2201-000808		C-CERAMIC,DISC;2.2NF,10%,400V,Y5P,12X7.5,7.5,	
C12	2201-000808		C-CERAMIC,DISC;2.2NF,10%,400V,Y5P,12X7.5,7.5,	
C13	2401-001567		C-AL;47UF,20%,400V,WT,18X20,10MM,	
C14	2201-000808		C-CERAMIC,DISC;2.2NF,10%,400V,Y5P,12X7.5,7.5,	
C15	2201-000808		C-CERAMIC,DISC;2.2NF,10%,400V,Y5P,12X7.5,7.5,	
C16	2301-000140		C-FILM,PEF;10NF,10%,630V,16.5X9.5X5.7X,12	
C17	2203-001537		C-CERAMIC,CHIP;1NF,10%,50V,X7R,2012,-,TP	
C18	2401-002180		C-AL;2.2UF,0.2,50V,GP,5X11,5MM,TP	
C19	2203-000840		C-CERAMIC,CHIP;390PF,5%,50V,NPO,2012,-,TP	
C20	2203-001576		C-CERAMIC,CHIP;150NF,+80-20%,50V,Z5U,2012,2MM	
C21	2401-001184		C-AL;33UF,20%,35V,GP,6X11,5MM,-	
C22	2401-002168		C-AL;100UF,0.2,50V,GP,10X12.5,5MM,TP	
C23	2203-000199		C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,2012,-,T	
C50	2401-001591		C-AL;47UF,20%,6.3V,GP,5X7,2.5MM,	
C51	2203-001537		C-CERAMIC,CHIP;1NF,10%,50V,X7R,2012,-,TP	
C52	2203-001537		C-CERAMIC,CHIP;1NF,10%,50V,X7R,2012,-,TP	
C53	2401-001878		C-AL;1000UF,20%,16V,GP,10X20MM,5MM	
C54	2401-001374		C-AL;470UF,20%,16V,WT,10X12.5,2.5MM	
C55	2203-000199		C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,2012,-,T	
C56	2203-000260		C-CERAMIC,CHIP;10NF,10%,50V,X7R,2012,-,TP	
C57	2401-001917		C-AL;1UF,20%,50V,-,5X7MM,5,TP	
C59	2401-001952		C-AL;4.7UF,20%,50V,-,4X7MM,5,TP	
C60	61453-131-105		C-CERAMIC.CHIP;GRM42-6Y5V105Z16 TAPG	
C61	2203-000199		C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,2012,-,T	
C62	B1100-0674		C-CERAMIC,CHIP;CK 73 Y5V 16V T 685-Z C3225	
C64	2201-000913		C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,8X3.5,5,	
C65	2202-000780		C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,3.5X19	
C66	2203-000199		C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,2012,-,T	
C67	2203-000199		C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5U,2012,-,T	
D10	0402-000386	⚠	DIODE-BRIDGE;S1WB60,600V,1A,DIP-4	
D11	0402-000391		DIODE-RECTIFIER;ERA22-10,1000V,500MA,MSR	
D12	0401-000170		DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
D13	0403-000646		DIODE-ZENER;RD20SB,20V,18.8-21.14V,200MW,M	
D14	0403-000648		DIODE-ZENER;RD4.7SB,4.7V,4.4-4.92,200MW,MI	
D15	0403-000647		DIODE-ZENER;RD24SB,24V,22.86-25.66V,200MW,	
D16	0402-000391		DIODE-RECTIFIER;ERA22-10,1000V,500MA,MSR	
D17	0402-000391		DIODE-RECTIFIER;ERA22-10,1000V,500MA,MSR	
D51	0404-000135		DIODE-SCHOTTKY;ESAC85M-009,90V,10A,TO-220,BK	
D52	0402-000165		DIODE-RECTIFIER;1N5819,40V,1A,DO-41,TP	
D53	0407-000114		DIODE-ARRAY;DAN202K,80V,100MA,CA2-3,SOT-23	
D54	0407-000116		DIODE-ARRAY;DAP202K,80V,100MA,CK2-3,SOT-23	
D55	0401-000170		DIODE-SWITCHING;MA110,40V,100MA,-,3NS,SM2	
D57	0403-000649		DIODE-ZENER;RD5.1S,5.1V,4.96-5.22V,200MW,M	
F10	B3065-0202	⚠	FUSE;DEMKO FST 250V 1.25A 5X20MM S505 C HBC	
IC11	AC14-12011C	⚠	IC;FA5304S,SOP,8P TAPE	
IC12	B4161-0037	⚠	PHOTO-COUPLER;TLP621-GR ST	
IC51	1201-000203		IC-OP AMP;3414,SOP,8P,300MIL,DUAL,-,PLAS	

Loc. No	New Part No		Description and Specification	Remark
IC52	AC14-12006R		IC;TK11640N,TO-92S,3P TAPE	
IC53	AD09-12001F	⚠	IC-MICOM;TMP47C241N,STICK,28P	
J51	B3040-0068	⚠	JACK-DC;PI3 HEC0740-01-010 3P	
L10	AC27-32001F	⚠	COIL-LINE FILTER;BSF-2123,20MH,2OHM,ST,-	
L11	A1247-0053		FILTER-EMI BEAD;BFS3565A0L SB 100OHM/100MHZ-90OH	
L51	2702-000112		INDUCTOR-RADIAL;10UH,5%,6X6.4MM	
L52	AC27-12001F		COIL-CHOKE;100UH,J,-,-,-,100UH-J RA 1KHZ	
LED51	B4150-0287		LED-DISPLAY;LN086WP38 ORG/GRN PI1.8	
PWR01	AC39-12022M		POWER-CORD;CP2,KJ-0201,BLK,YH396-32V,1.83	
Q10	0505-001044	⚠	FET-SILICON;SSS3N80,N,800V,1.8A,5OHM,35W,T	
Q51	0502-000399		TR-POWER;2SB1127S,PNP,1W,TO-126,BK,140-	
Q52	62129-101-110		TRANSISTOR.CHIP;KSR 1102 (REEL)	
Q53	0502-000431		TR-POWER;2SB1203S,PNP,1W,IPAK,TP,140-28	
Q54	62129-101-110		TRANSISTOR.CHIP;KSR 1102 (REEL)	
Q55	0504-000158		TR-DIGITAL;KSR2104,PNP,200MW,47K-47K,SOT-	
Q56	0504-000158		TR-DIGITAL;KSR2104,PNP,200MW,47K-47K,SOT-	
Q57	0504-000158		TR-DIGITAL;KSR2104,PNP,200MW,47K-47K,SOT-	
R01	2007-000029		R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
R02	2007-000029		R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
R03	2007-000029		R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
R04	2007-000029		R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
R05	2007-000033		R-CHIP;0OHM,5%,1/8W,DA,TP,3216	
R06	2007-000033		R-CHIP;0OHM,5%,1/8W,DA,TP,3216	
R10	2001-000474		R-CARBON;2.7MOHM,5%,1/4W,AA,TP,2.4X6.4M	
R12	A1014-0079		R-CEMENT;RWC 2W I 3R3-J ST ABCO	
R13	2001-001000		R-CARBON;82KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R14	2001-001000		R-CARBON;82KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R15	2007-001212		R-CHIP;82KOHM,5%,1/8W,DA,TP,3216	
R16	2001-001000		R-CARBON;82KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R17	2003-000307		R-METAL OXIDE;47KOHM,5%,2W,AD,TP,6X16MM	
R19	2003-000111		R-METAL OXIDE;0.47OHM,5%,1W,AD,TP,4.3X12MM	
R20	2007-000572		R-CHIP;220OHM,5%,1/10W,DA,TP,2012	
R21	2007-000781		R-CHIP;33OHM,5%,1/10W,DA,TP,2012	
R22	2007-000248		R-CHIP;1.5MOHM,5%,1/10W,DA,TP,2012	
R24	2007-000781		R-CHIP;33OHM,5%,1/10W,DA,TP,2012	
R25	2007-001177		R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012	
R51	2007-000312		R-CHIP;10OHM,5%,1/8W,DA,TP,3216	
R52	2007-000515		R-CHIP;2.7KOHM,1%,1/10W,DA,TP,2012	
R53	2007-000218		R-CHIP;1.2KOHM,1%,1/10W,DA,TP,2012	
R54	2007-000639		R-CHIP;270OHM,1%,1/10W,DA,TP,2012	
R55	2007-000282		R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R56	2007-000572		R-CHIP;220OHM,5%,1/10W,DA,TP,2012	
R57	2007-000518		R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R58	2007-000282		R-CHIP;100KOHM,5%,1/10W,DA,TP,2012	
R59	2007-000361		R-CHIP;12OHM,5%,1/10W,DA,TP,2012	
R60	2007-000928		R-CHIP;470OHM,1%,1/10W,DA,TP,2012	
R61	2007-000218		R-CHIP;1.2KOHM,1%,1/10W,DA,TP,2012	
R62	2007-000868		R-CHIP;4.7KOHM,1%,1/10W,DA,TP,2012	
R63	2007-000868		R-CHIP;4.7KOHM,1%,1/10W,DA,TP,2012	
R64	2007-000658		R-CHIP;27OHM,5%,1/10W,DA,TP,2012	
R65	2003-000102		R-METAL OXIDE;0.1OHM,5%,1W,AD,TP,4.3X12MM	
R66	2007-000355		R-CHIP;12KOHM,5%,1/10W,DA,TP,2012	
R67	2007-000221		R-CHIP;1.2KOHM,5%,1/10W,DA,TP,2012	
R68	2007-000493		R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012	
R69	2007-000931		R-CHIP;470OHM,5%,1/10W,DA,TP,2012	

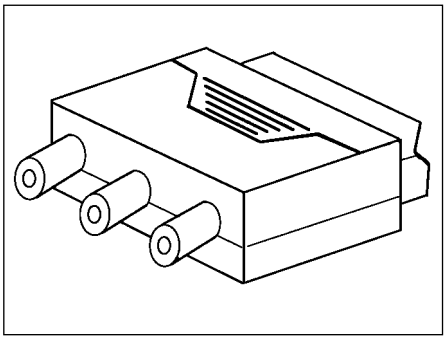
Loc. No	New Part No		Description and Specification	Remark
R70	B1004-0442		R-METAL OXIDE;RS 3W N 43-J ERG3SJ430H	
R71	2007-000300		R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R72	2007-000300		R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R73	2007-000468		R-CHIP;1KOHM,5%,1/10W,DA,TP,2012	
R74	B1004-0442		R-METAL OXIDE;RS 3W N 43-J ERG3SJ430H	
R75	2007-000409		R-CHIP;15KOHM,5%,1/10W,DA,TP,2012	
R76	2007-000409		R-CHIP;15KOHM,5%,1/10W,DA,TP,2012	
R77	2007-000300		R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R78	2007-000409		R-CHIP;15KOHM,5%,1/10W,DA,TP,2012	
R79	2007-000300		R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
R80	2007-000822		R-CHIP;390OHM,5%,1/10W,DA,TP,2012	
R81	2007-000409		R-CHIP;15KOHM,5%,1/10W,DA,TP,2012	
R82	2007-000518		R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012	
R83	2007-000822		R-CHIP;390OHM,5%,1/10W,DA,TP,2012	
R84	2007-000653		R-CHIP;27KOHM,5%,1/10W,DA,TP,2012	
R85	2007-000409		R-CHIP;15KOHM,5%,1/10W,DA,TP,2012	
R86	2007-000653		R-CHIP;27KOHM,5%,1/10W,DA,TP,2012	
R87	2003-000146		R-METAL OXIDE;100OHM,5%,1W,AD,TP,4.3X12MM	
R90	2007-000950		R-CHIP;47OHM,5%,1/8W,DA,TP,3216	
R91	2007-000950		R-CHIP;47OHM,5%,1/8W,DA,TP,3216	
R92	2007-000950		R-CHIP;47OHM,5%,1/8W,DA,TP,3216	
R93	2007-000950		R-CHIP;47OHM,5%,1/8W,DA,TP,3216	
R94	2007-000653		R-CHIP;27KOHM,5%,1/10W,DA,TP,2012	
R95	2007-000221		R-CHIP;1.2KOHM,5%,1/10W,DA,TP,2012	
R96	2007-000267		R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012	
R97	2001-000429		R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
SW51	3404-000239		SWITCH-TACT;15V,20MA,130+-40GF,6X6MM,-	
T10	AC26-80001F	⚠	TRANS-POWER;EI25X19,AC90/260V,50HZ,-	
W10	3711-000178		CONNECTOR-HEADER;1WALL,2P,1R,3.96MM,STRAIGHT,SN	
XT51	64539-102-012		CERAMIC RESONATOR;FCR 4.0MC5	
2	**3722-001027**		**JACK-RCA(SCART ADAPTOR);PI7.5,-,AU,BLK,-**	
3	**AC39-42001N**		**CABLE-A/V;-,-,1.5MT,RCA,-,-,-**	
4	**AC39-42001Y**		**CABLE-DC;DC/OUT,-,DC-E1A,7.5V,-,-,-**	
5	**AC98-10012L**		**ASSY-LITHUM BATTERY;CR2025,3V PACK 30X56**	
6	**AD59-10373A**		**UNIT-BATTERY PACK;NC-120P,6V 1200MAH(PAL)**	
7	**AD59-10379A**		**UNIT-REMOCON;RM-A1,(PAL)**	
8	**AD63-10210A**		**STRAP-SHOULDER;-,LEATHER,T1.5,1280X10,D-GRAT,**	
9	**AC46-12001D**		**8MM CASSETTE TAPE**	
10	**AC59-92002V**		**RF-E1P**	
11	**AC59-92003E**		**RF-E2P**	

ACCESSORY

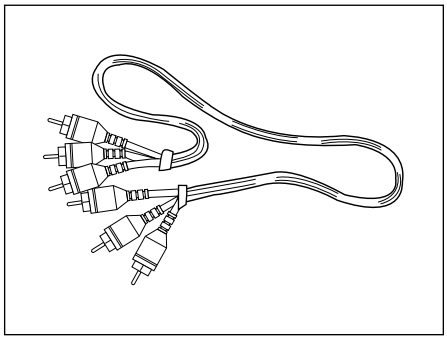
1



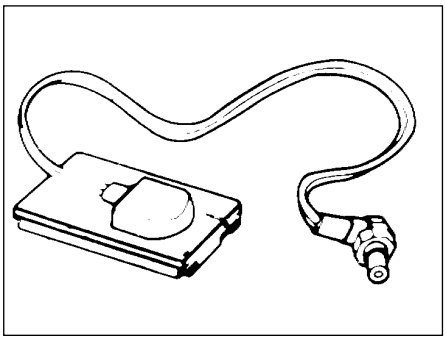
2



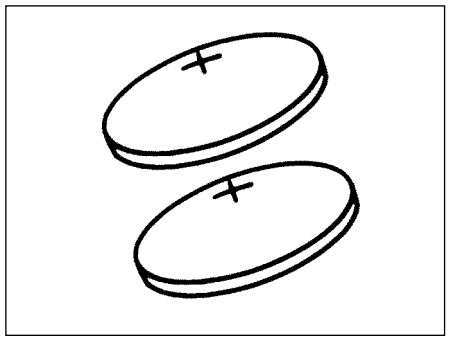
3



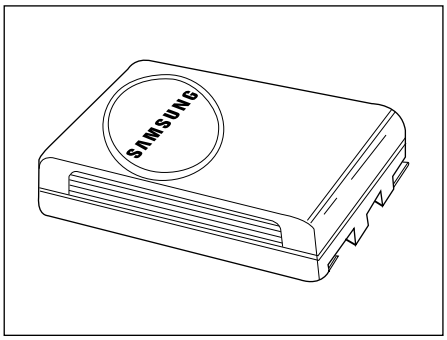
4



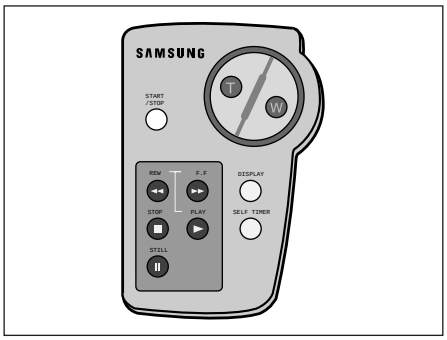
5



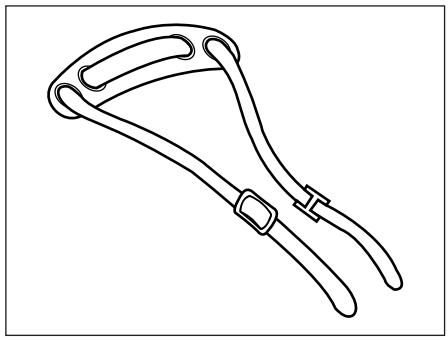
6



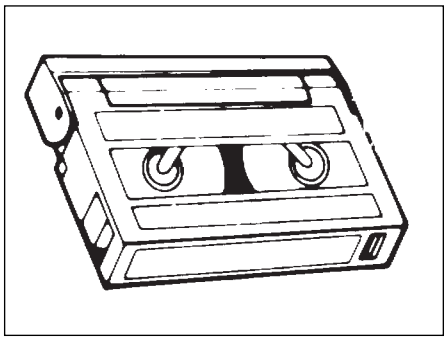
7



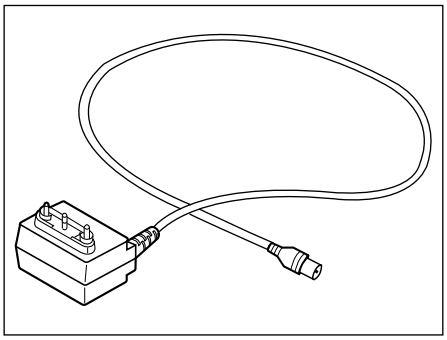
8



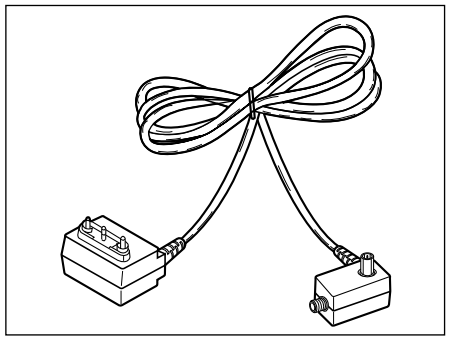
9



10



11

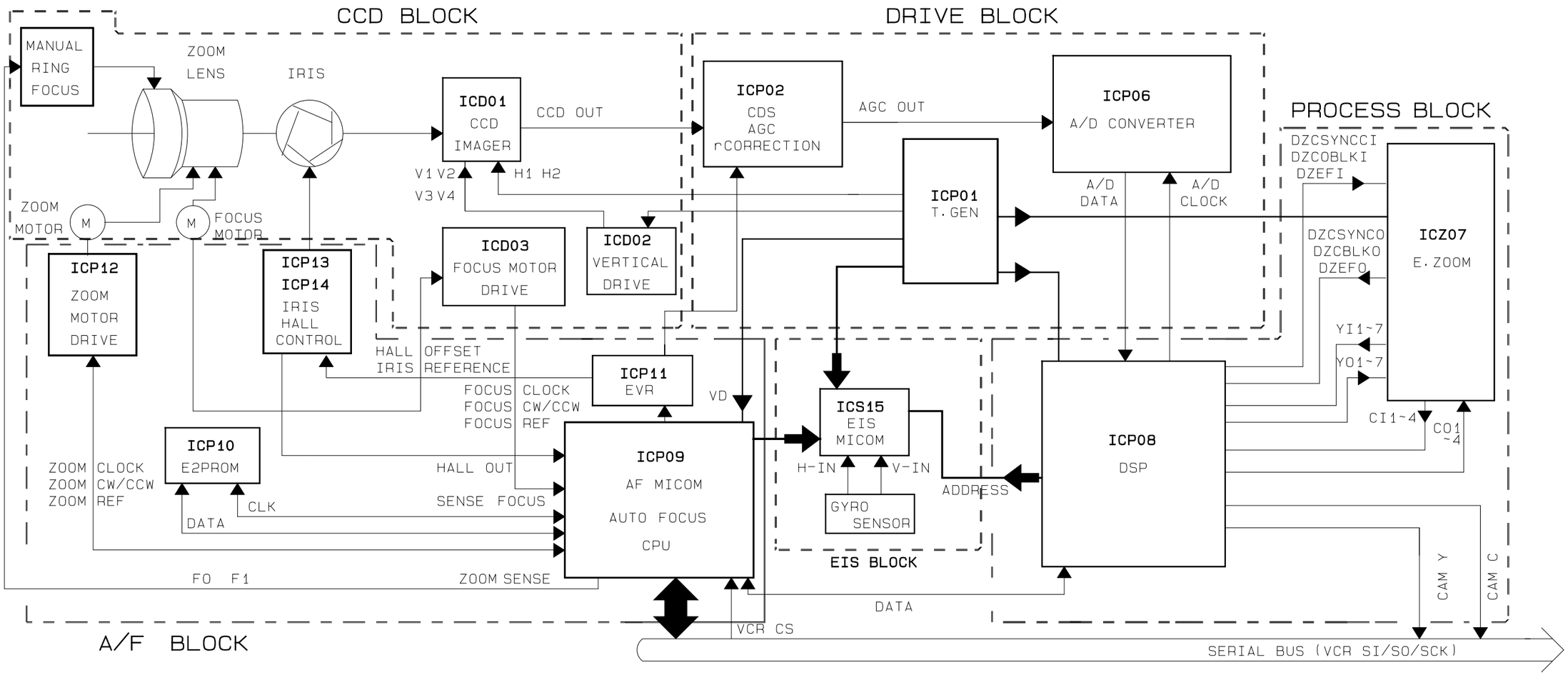


Note : The accessories may be different by buyer.

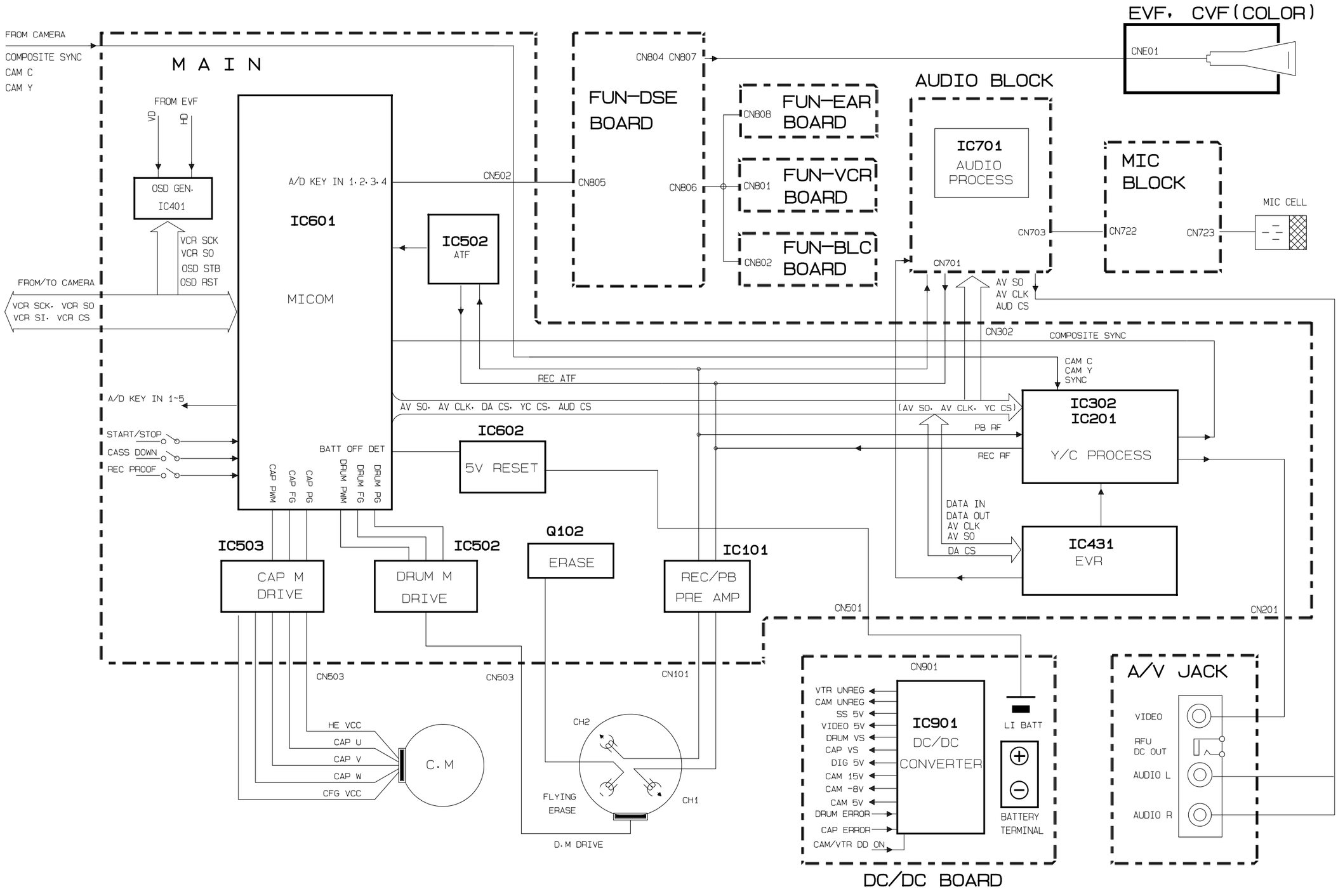
8. Block Diagrams

		Page
8-1	Overall Block Diagram (Camera)	8-2
8-2	Overall Block Diagram (VCR)	8-3
8-3	DC/DC Converter	8-4
8-4	Drum Servo	8-5
8-5	Capstan Servo	8-6
8-6	Video Playback	8-7
8-7	Video Record	8-8
8-8	Audio(Mono)	8-9
8-9	Audio (Stereo)	8-10
8-10	Camera Main/CCD	8-11

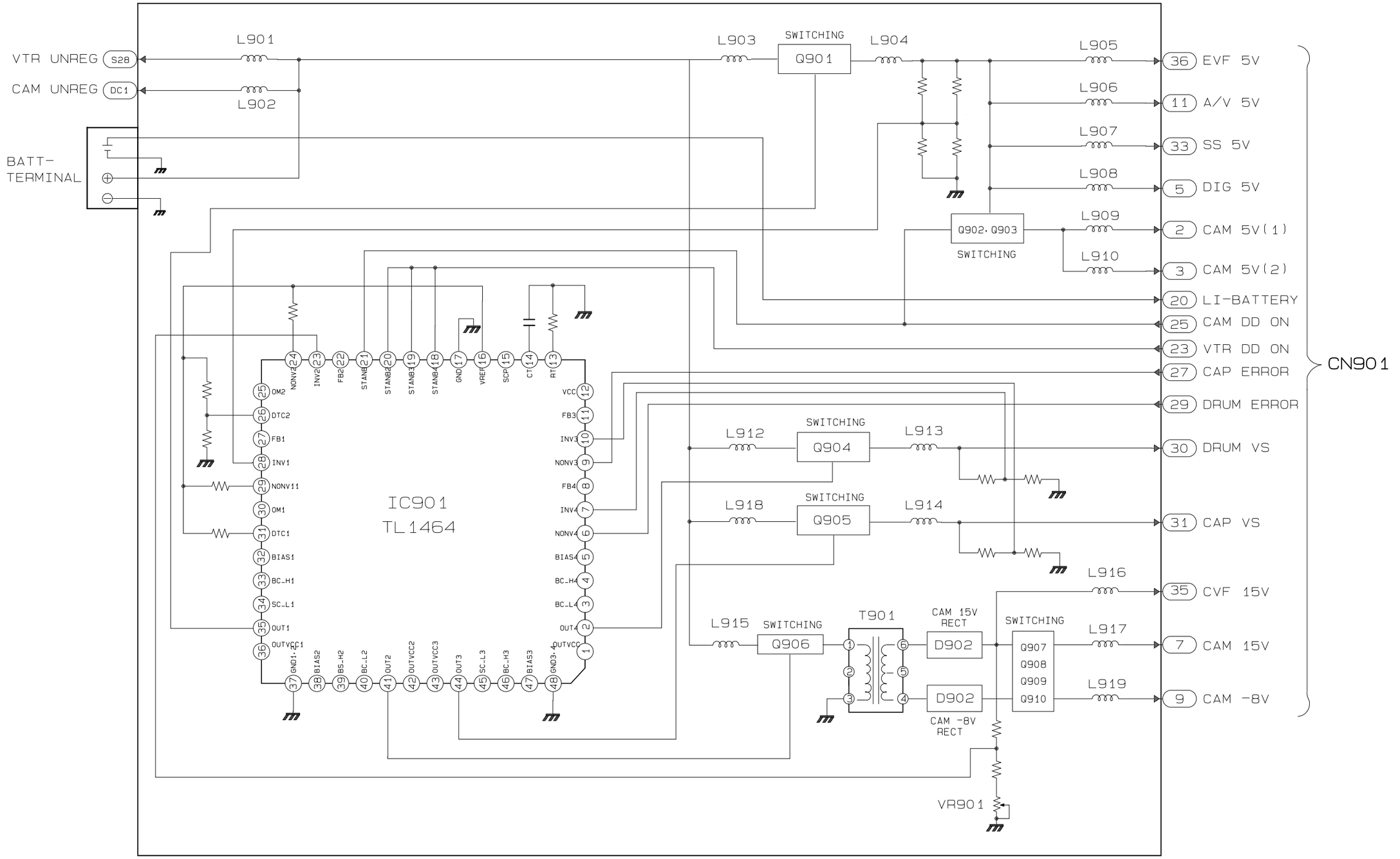
8-1 Overall Block Diagram (Camera)



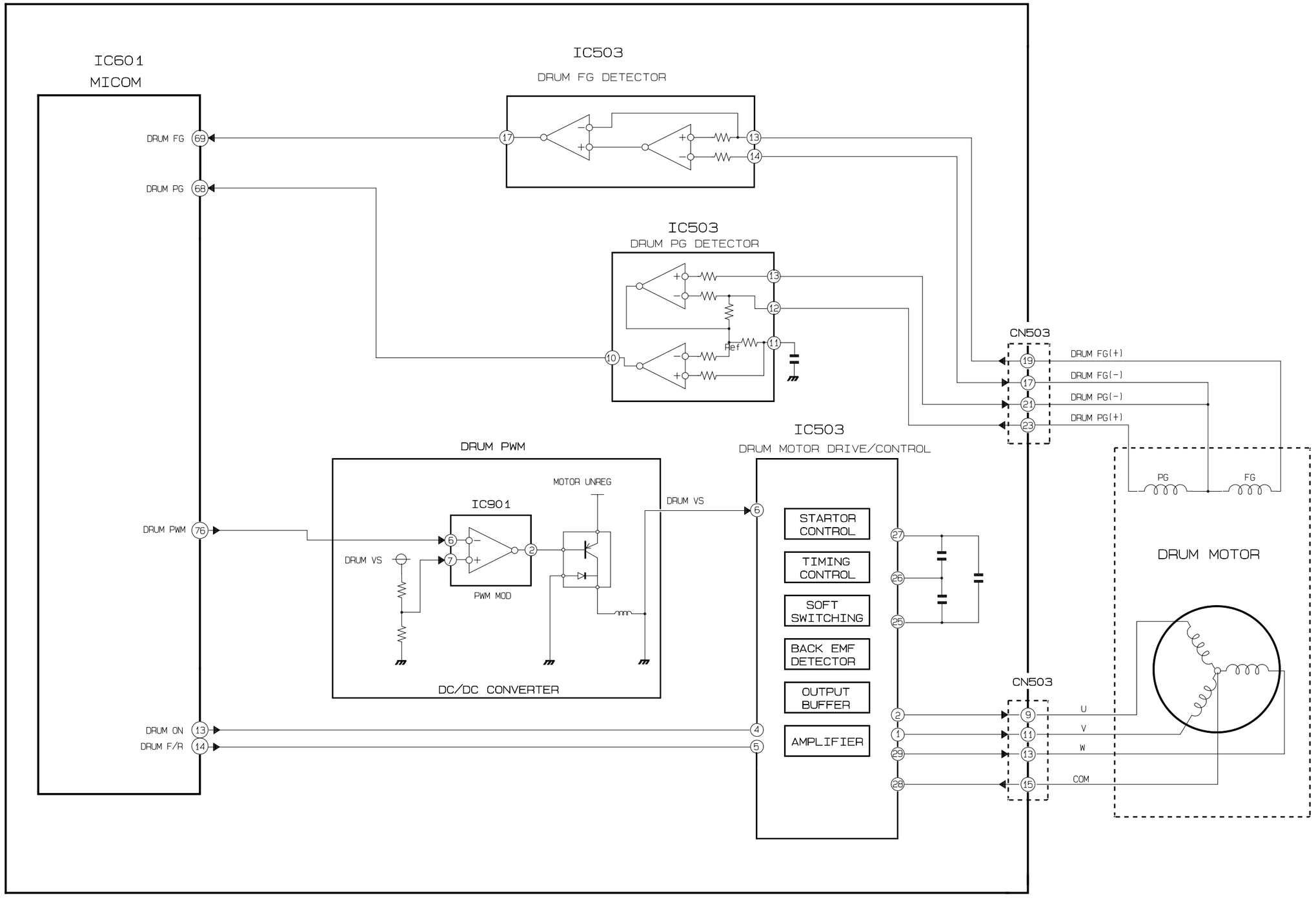
8-2 Overall Block Diagram (VCR)



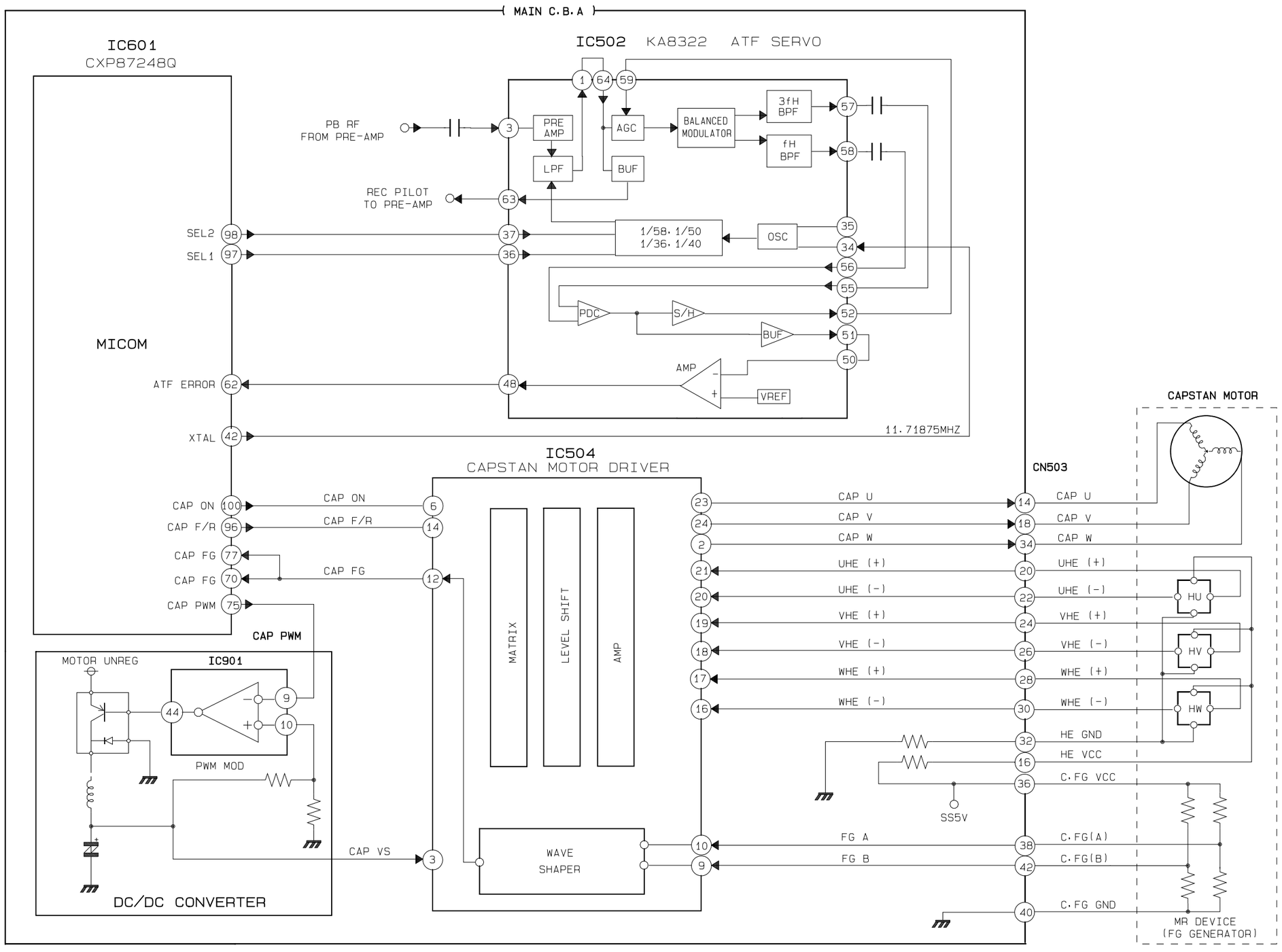
8-3 DC/DC Converter



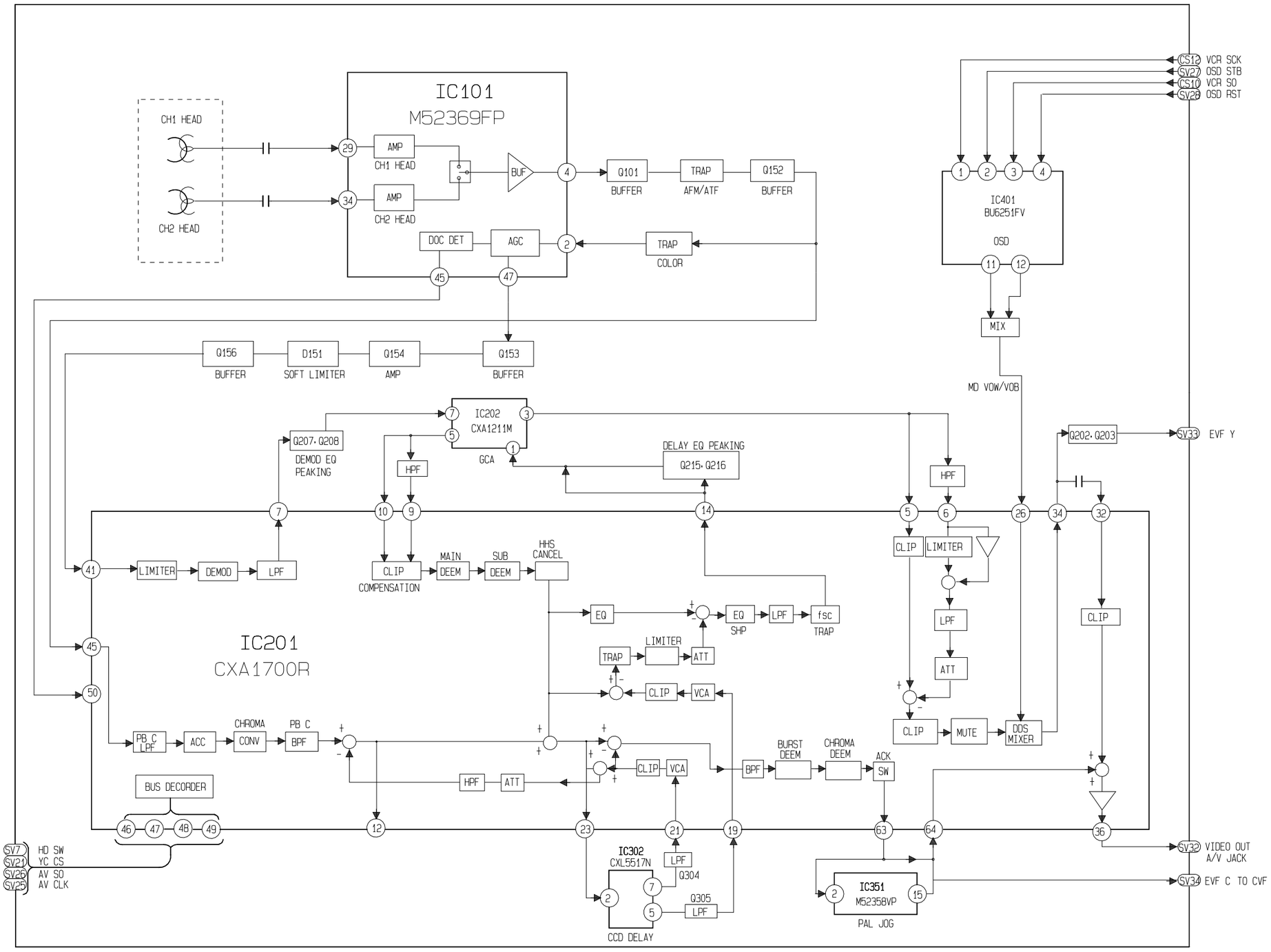
8-4 Drum Servo



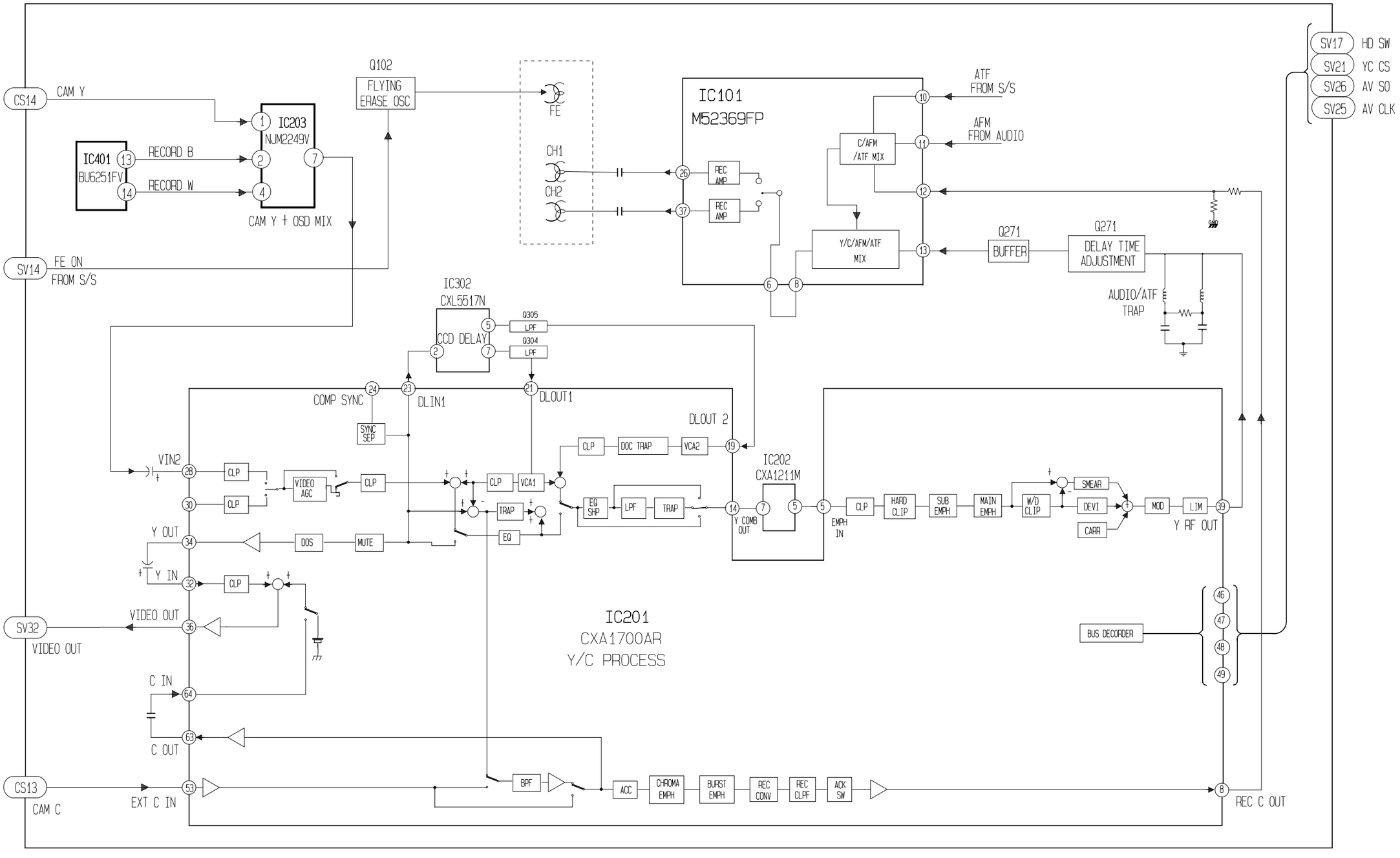
8-5 Capstan Servo



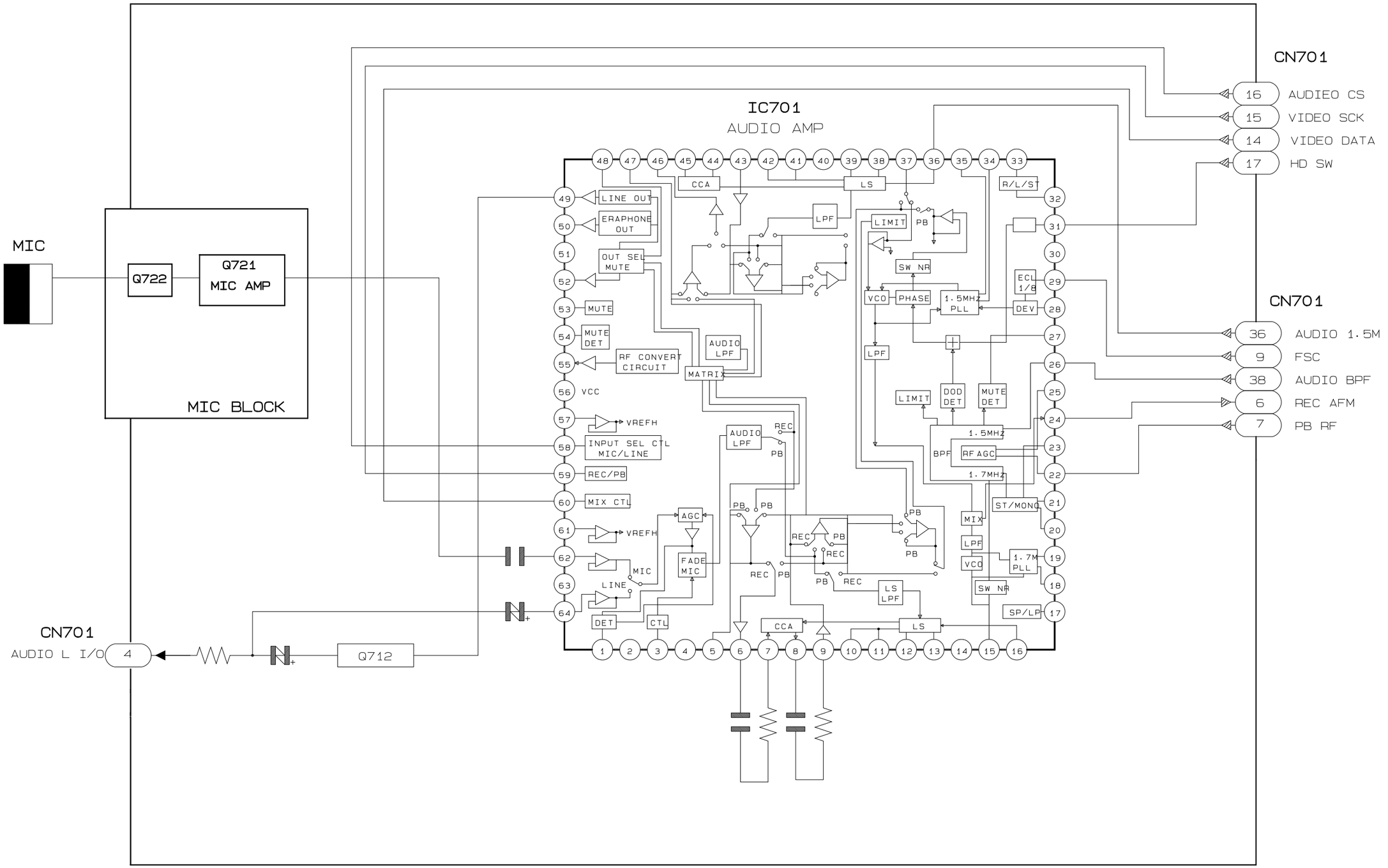
8-6 Video Playback



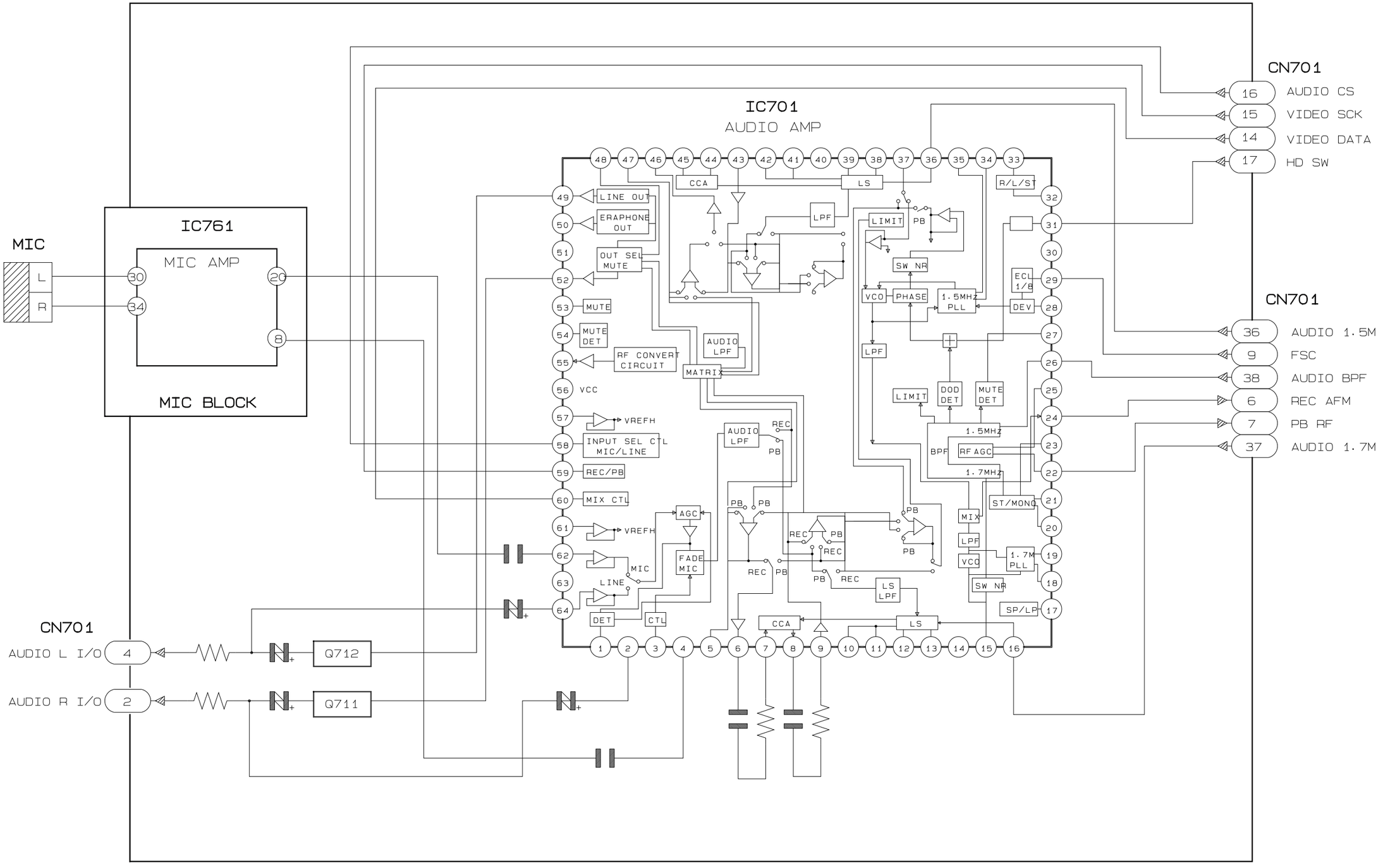
8-7 Video Record



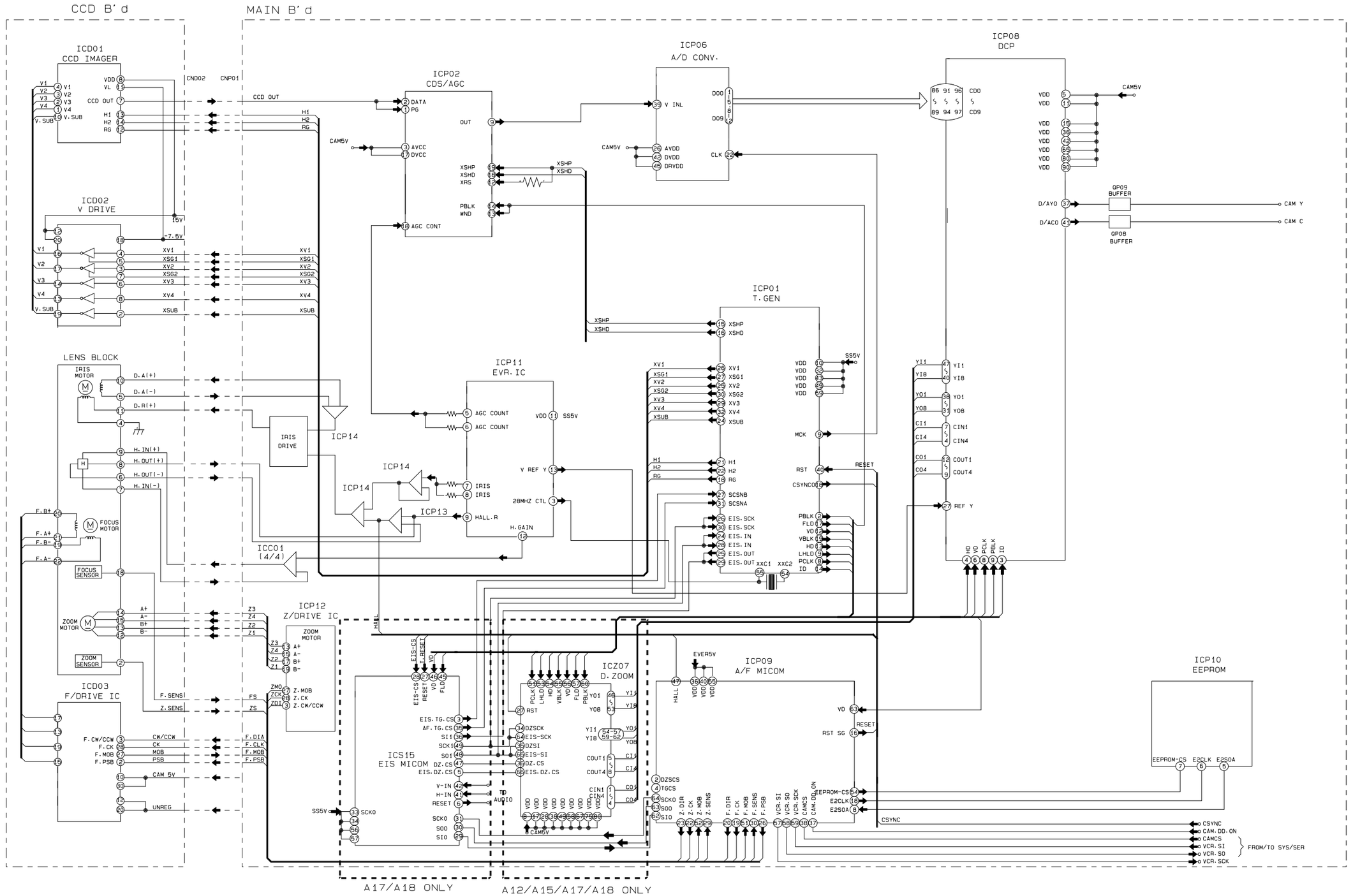
8-8 Audio (Mono)



8-9 Audio (Stereo)



8-10 Camera Main/CCD



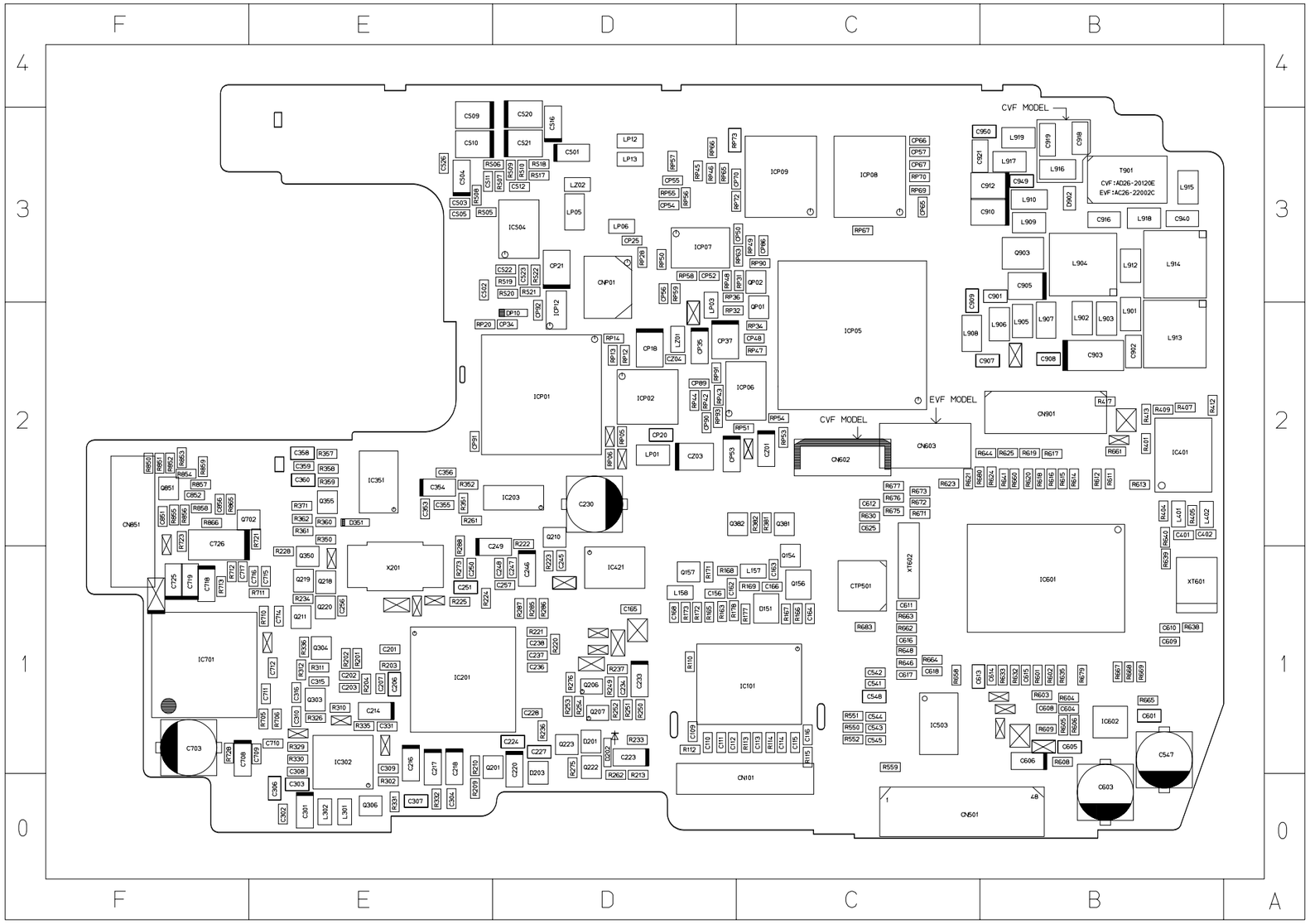
9. PCB Diagrams

		Page
9-1	Main	9-2
9-2	Rear	9-4
9-3	Front	9-5
9-4	Terminal	9-5
9-5	CVF (VP-A21/A23)	9-6
9-6	EVF (VP-A20/A22)	9-6
9-7	CCD	9-7

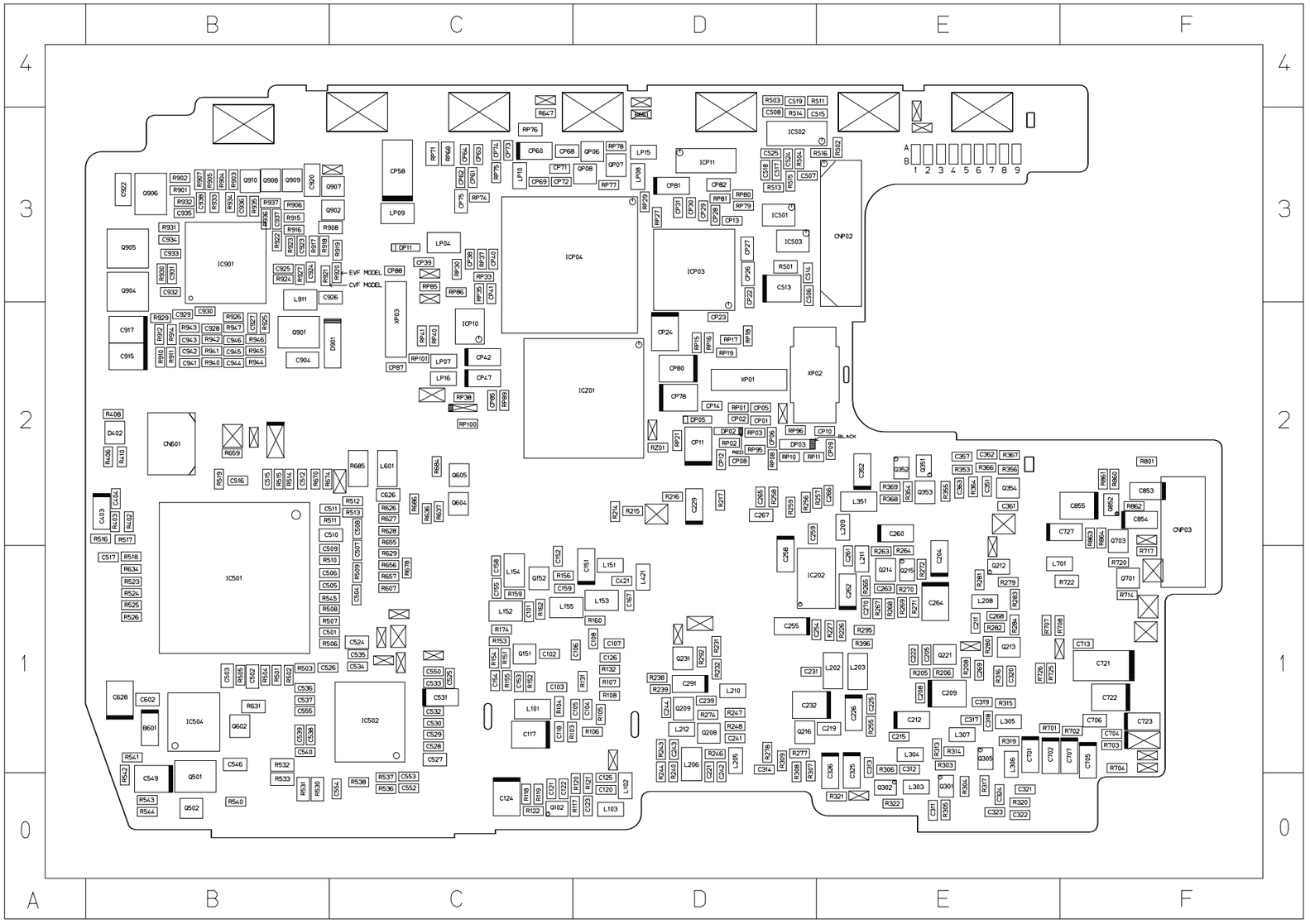
9-1 Main

I C	TRANSISTOR	COIL
IC101 (C1)	Q154 (C1)	L157 (C1)
IC201 (E1)	Q156 (C1)	L158 (D1)
IC203 (D2)	Q157 (D1)	L207 (E1)
IC302 (E1)	Q201 (D1)	L301 (E0)
IC401 (B2)	Q206 (D1)	L302 (E0)
IC421 (D1)	Q207 (D1)	L401 (B2)
IC503 (C1)	Q210 (D1)	L402 (B2)
IC601 (B1)	Q211 (E1)	L901 (B2)
IC602 (B1)	Q219 (E1)	L902 (B2)
IC701 (F1)	Q220 (E1)	L903 (B2)
ICP01 (D2)	Q222 (D1)	L904 (B3)
ICP02 (D2)	Q223 (D1)	L905 (B2)
ICP05 (C2)	Q303 (E1)	L906 (B2)
ICP06 (C2)	Q304 (E1)	L907 (B2)
ICP07 (D3)	Q306 (E0)	L908 (C2)
ICP08 (C3)	Q381 (C2)	L909 (B3)
ICP09 (C3)	Q382 (C2)	L910 (B3)
ICP12 (D2)	Q401 (B2)	L912 (B3)
ICS04 (D3)	Q702 (E2)	L913 (B2)
	Q851 (F2)	L914 (B3)
	Q903 (B3)	L915 (B3)
CONNECTOR	QP01 (C2)	L916 (B3)
	QP02 (C3)	L917 (B3)
CN101 (C0)		L918 (B3)
CN501 (C0)		L919 (B3)
CN602 (C2)		LP01 (D2)
CN603 (C2)	DIODE	LP03 (D2)
CN851 (F2)	D151 (C1)	LP05 (D3)
CN901 (B2)	D201 (D1)	LP06 (D3)
CNP01 (D2)	D202 (D1)	LP12 (D3)
CTP501 (C1)	D203 (D0)	LP13 (D3)
	D902 (B3)	LZ01 (D2)
	DP10 (D2)	LZ02 (D3)

TRANS	X-TAL
T901 (B3)	X201 (E1)
	XT601 (B1)
	XT602 (C1)



(Component Side)



COIL

L101 (C1)
L102 (D0)
L103 (D0)
L151 (D1)
L152 (C1)
L153 (D1)
L154 (C1)
L155 (C1)
L202 (E1)
L203 (E1)
L205 (D1)
L206 (D1)
L209 (E1)
L210 (D1)
L211 (E1)
L212 (D1)
L305 (E1)
L306 (E1)
L351 (E2)
L421 (D1)
L601 (C2)
L701 (E1)
L911 (B2)
LP04 (C3)
LP09 (C3)
LP07 (C2)
LP08 (D3)
LP10 (C3)
LP15 (D3)
LP16 (C2)

TRANSISTOR

Q102 (C0)
Q151 (C1)
Q152 (C1)
Q208 (D1)
Q209 (D1)
Q214 (E1)
Q215 (E1)
Q216 (D1)
Q231 (D1)
Q302 (E0)
Q305 (E1)
Q352 (E2)
Q501 (B0)
Q502 (B0)
Q602 (B1)
Q604 (C2)
Q605 (C2)
Q701 (F1)
Q703 (F1)
Q852 (F2)
Q901 (B2)
Q902 (B3)
Q904 (B2)
Q905 (B3)
Q906 (B3)
Q907 (B3)
Q908 (B3)
Q909 (B3)
Q910 (B3)
QP06 (D3)
QP07 (D3)
QP08 (D3)

I C

IC202 (D1)
IC501 (B1)
IC502 (C1)
IC504 (B1)
IC901 (B3)
ICP03 (D3)
ICP04 (C3)
ICP10 (C2)
ICP11 (D3)
ICS01 (D3)
ICS02 (D3)
ICS03 (D3)
ICZ01 (D2)

X-TAL

XP01 (D2)
XP03 (C2)

DIODE

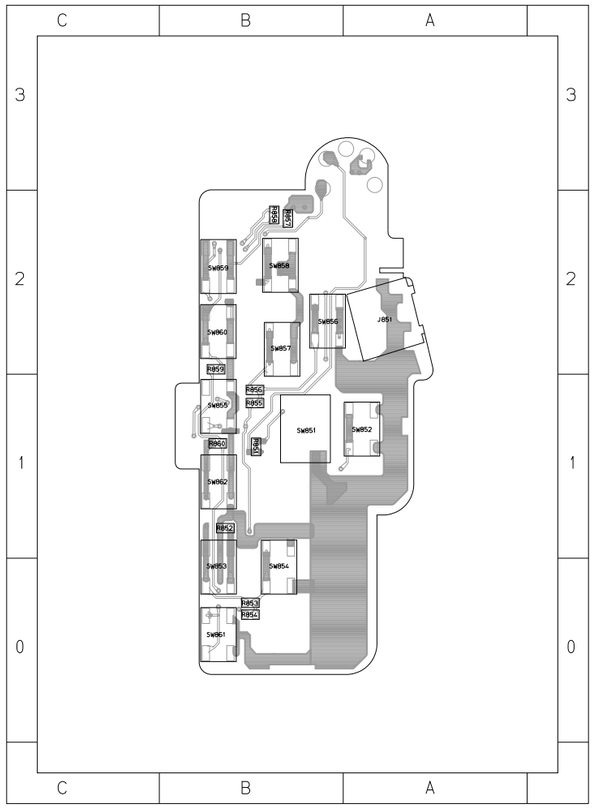
D402 (B2)
D901 (B2)
DP02 (D2)
DP05 (D2)
DP11 (C3)

CONNECTOR

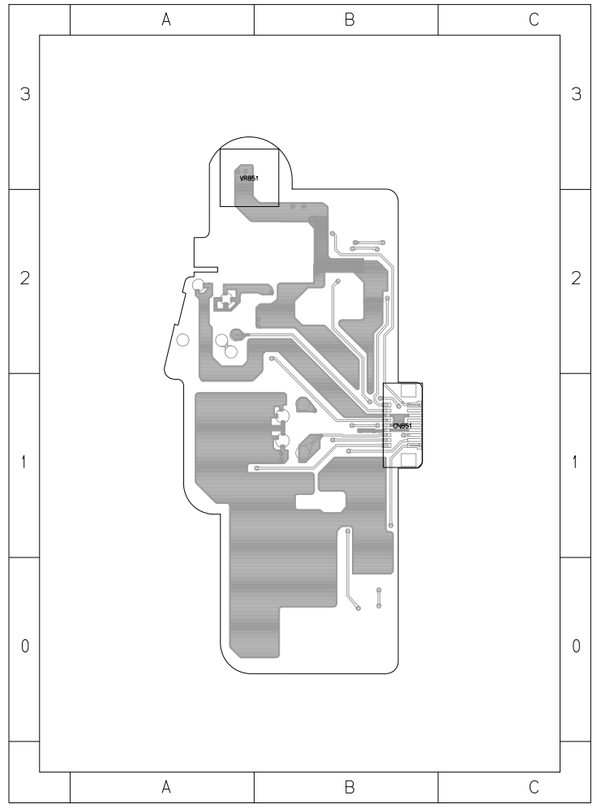
CN601 (B2)
CNP02 (E3)
CNP03 (F1)

(Conductor Side)

9-2 Rear

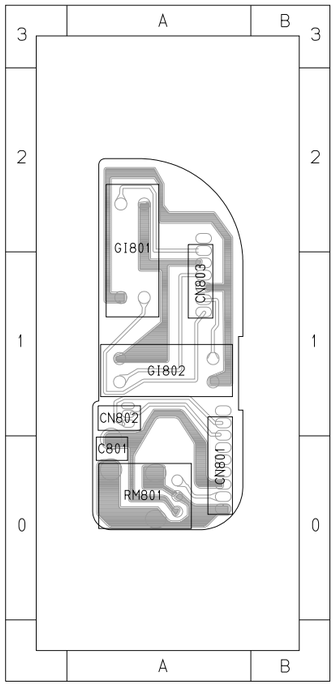


(Component Side)

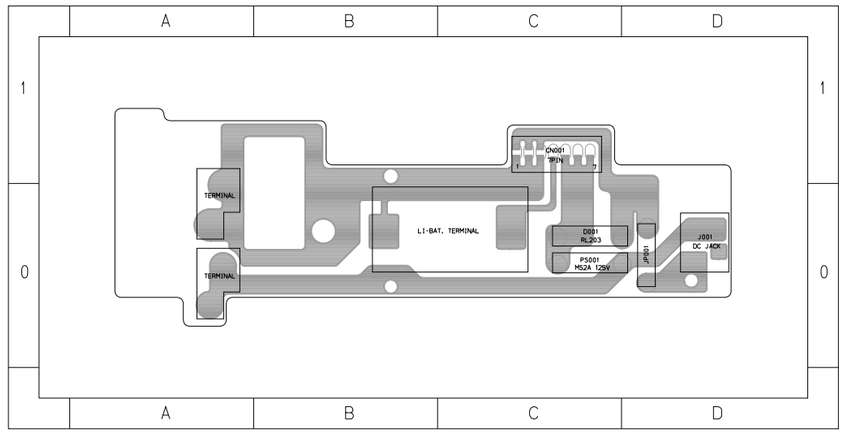


(Conductor Side)

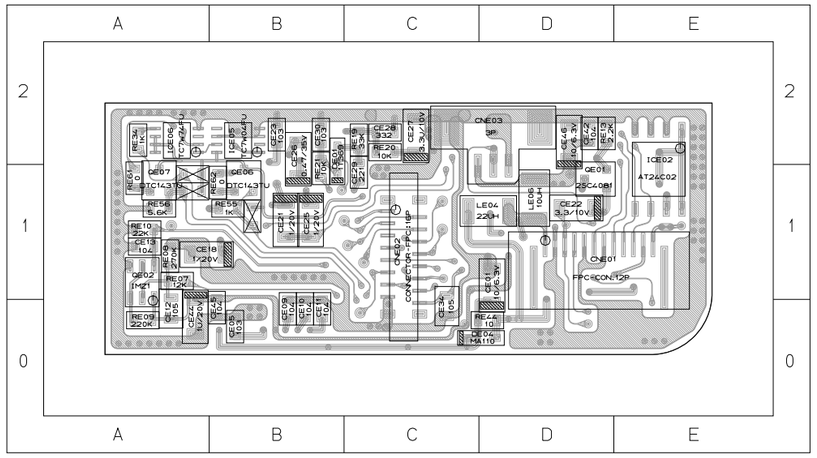
9-3 Front



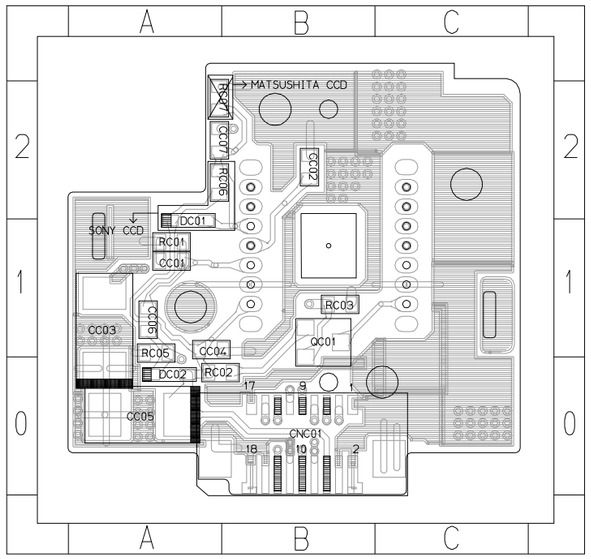
9-4 Terminal



9-5 CVF (VP-A21/A23)

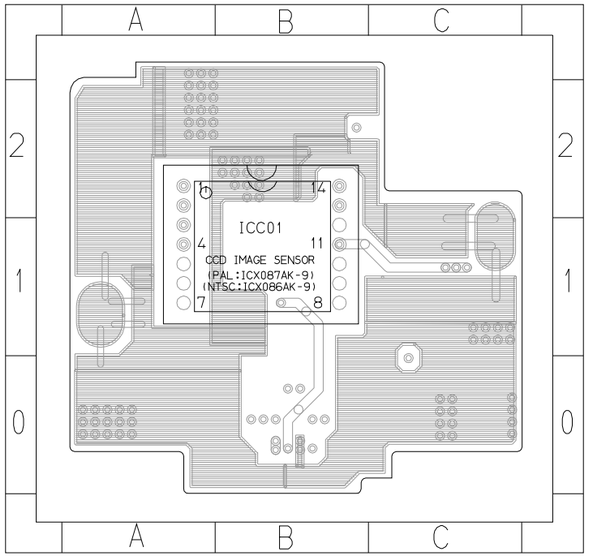

A
B
C
D
E
2
1
0
CNE03
SIP
LE04
22UH
LE05
10UH
CE22
3.3/10V
QE01
2SC4081
ICE02
AT24C02
CNE01
FPC40CON-12P
CNE02
CONNECTOR-FPC-18P
QE02
CE11
10/6.3V
QE04
MA110
RE44
10
CE36
105
CE35
102
RE09
220K
CE12
102
CE13
104
RE10
22K
RE34
47K
CE06
104
QE07
DTC143TU
RE60
0
RE62
0
CE07
1/25V
RE56
5.6K
RE55
1K
CE08
1/25V
CE09
1/25V
RE35
1.5K
CE23
103
CE24
1/25V
CE25
1/25V
RE36
1.5K
CE26
332
RE20
10K
CE27
3.3/10V
RE21
10K
RE22
1.5K
CE29
332
RE23
1.5K
CE30
103
CE31
1/25V
CE32
1/25V
CE33
1/25V
CE34
1/25V
CE14
104
CE18
1/20V
RE37
270K
QE02
1M21
RE07
1K
RE08
220K
CE10
104
CE15
104
CE16
104
RE45
10/25V
CE38
105
RE46
10K
CE39
105
CE40
1/20V
RE51
4.7K
RE50
100K
LE05
22UH
CE43
10/16V
RE12
2.7K
RE11
2K
RE29
0
QE04
DTC143TU
QE03
DTC143TU
QE05
DTC143TU
RE26
4.7K
RE25
4.7K
RE28
15K/F
RE27
24K/F
RE24
4.7K
RE22
24K/F
CE37
105
RE30
2.2K
CE50
10/16V
CE42
1/20V
LE02
22UH
RE38
0
CE51
104
RE57
1.8K
RE58
5.6K
QE08
2SC4081
LE07
22UH
RE59
0
CE44
1/20V
RE40
100K
LE03
10UH
CE31
680
CE32
10/16V
CE33
105
RE16
75Ω
RE17
0
CE45
103
RE52
1K
RE53
470
RE54
0
CE46
103
RE49
0
CE47
1/25V
RE48
0
CE48
1/25V
RE47
220
RE42
10K
RE43
220
CE20
104
ICE01
CXA2503R
CE53
105
CE52
105
CE54
105
CE55
105
CE56
105
CE57
105
CE58
105
CE59
105
CE60
105
CE61
105
CE62
105
CE63
105
CE64
105
CE65
105
CE66
105
CE67
105
CE68
105
CE69
105
CE70
105
CE71
105
CE72
105
CE73
105

9-7 CCD



CNC01 0B
QC01 1B

(Component Side)

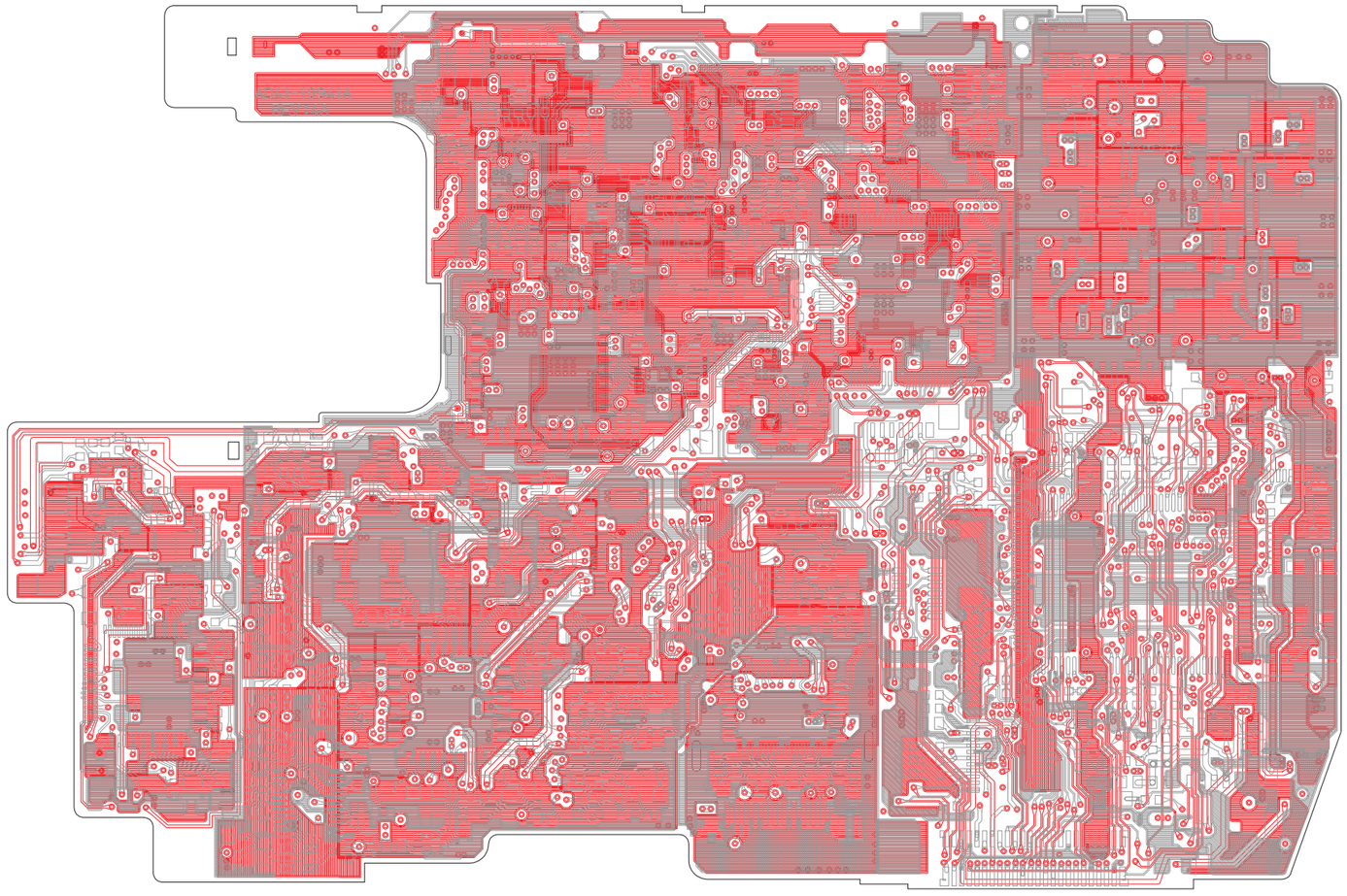


ICC01 1B

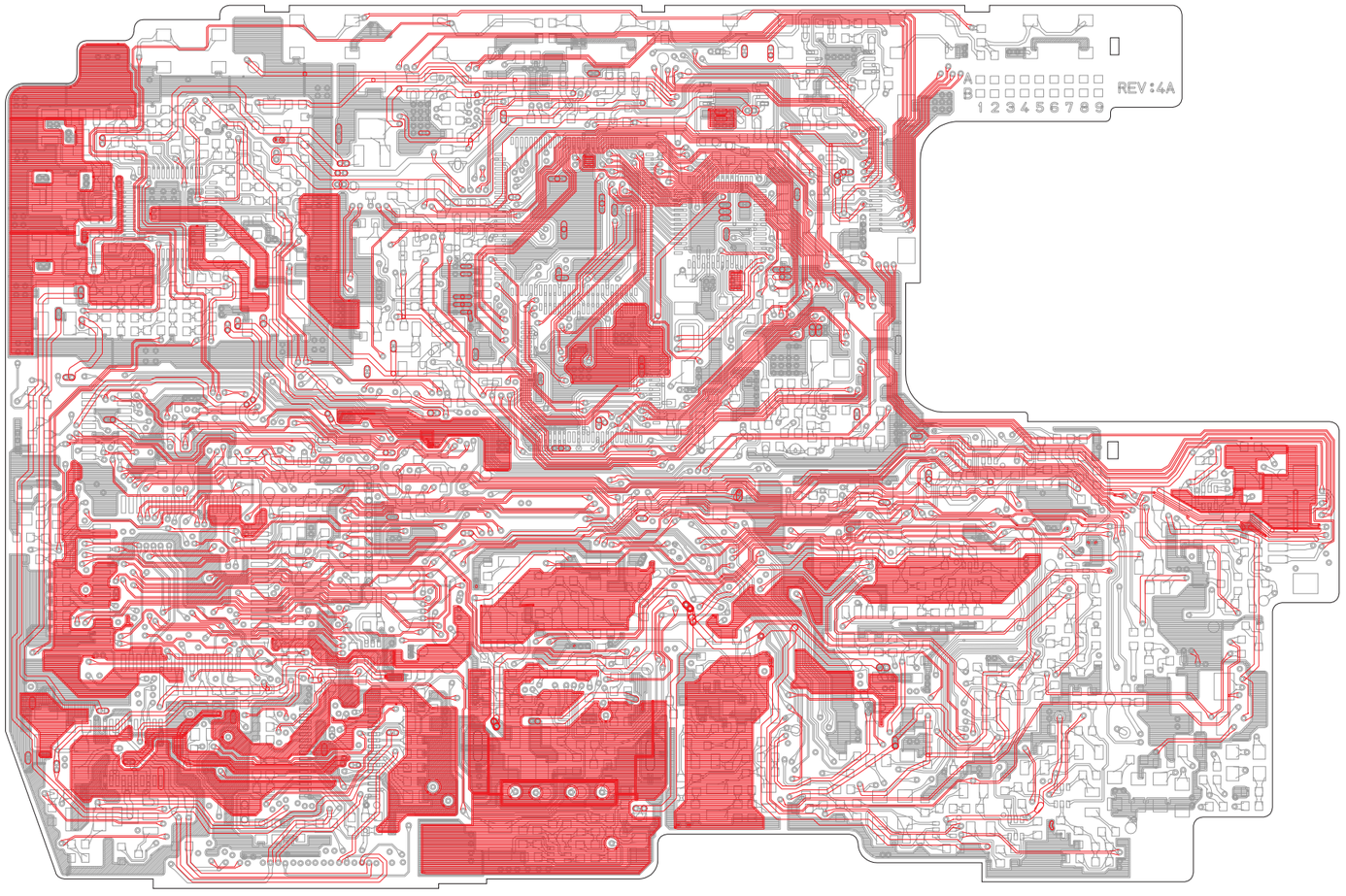
(Conductor Side)

MEMO

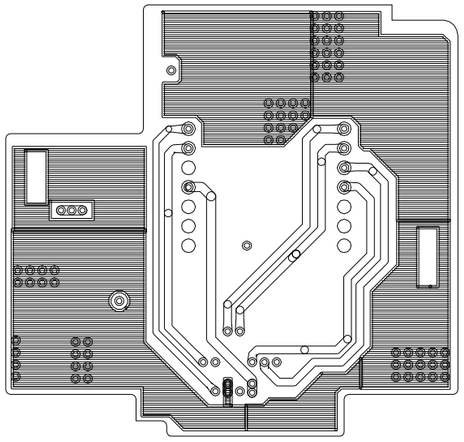
9-1 MAIN -2 (COMPONENT - PATTERN)



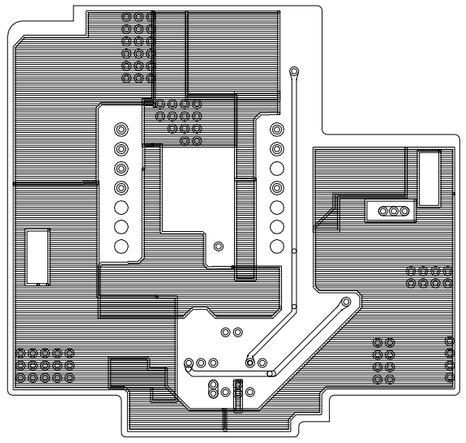
9-1 MAIN 2 (CONDUCTOR - PATTERN)



9-7 CCD (pattern)

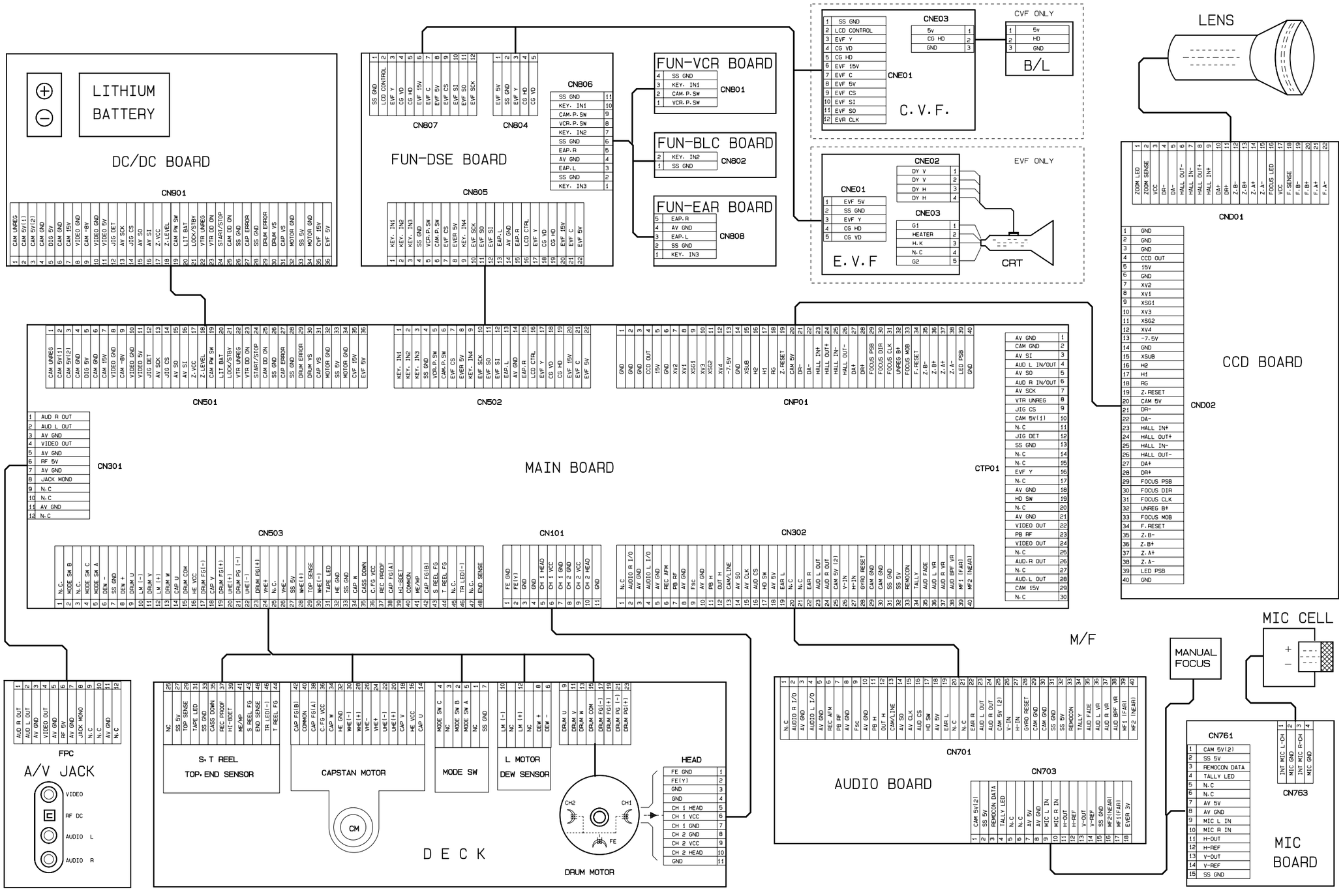


(Component Side)



(Conductor Side)

10. Wiring Diagram



11. Schematic Diagrams

Page

◆ Block Identification of Main PCB - - - - - - - - - - - - - - - 11-2

11-1 DC/DC Converter - 11-3

11-2 System Control/Servo - 11-4

11-3 Video - 11-5

11-4 Audio (Mono) - 11-6

11-5 Audio (Stereo) - 11-7

11-6 MIC (Mono) - 11-8

11-7 MIC (Stereo) - 11-9

11-8 Camera Main - 11-10

11-9 CCD - 11-12

11-10 EIS (VP-A17/VP-A18) - - - - - - - - - - - - - - - - - - - 11-13

11-11 EVF(VP-A12/VP-A17) - - - - - - - - - - - - - - - - - - - 11-14

11-12 CVF(VP-A15/VP-A18) - - - - - - - - - - - - - - - - - - - 11-15

11-13 Function - 11-16

11-14 Adaptor - 11-17

Note

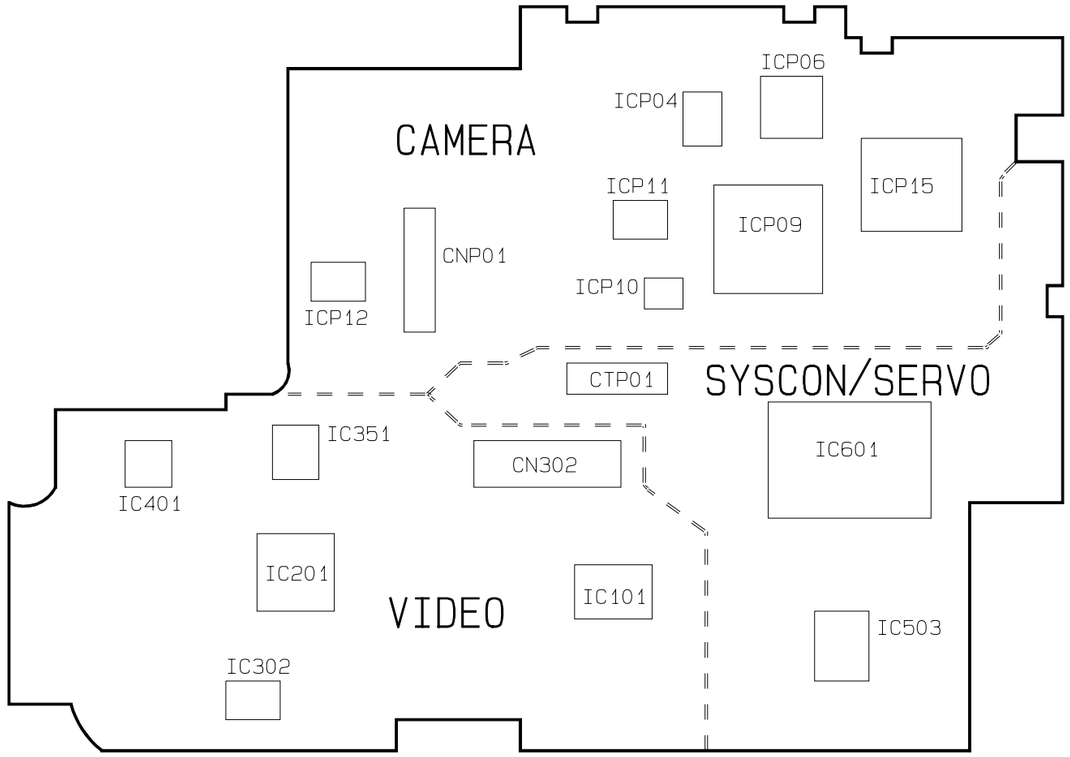
For schematic Diagram
- Resistors are in ohms, 1/8W unless otherwise noted.
- Circled numbers refer to waveforms.

Special note :
Most semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the “electrostatically sensitive (ES) devices” section of this service manual.

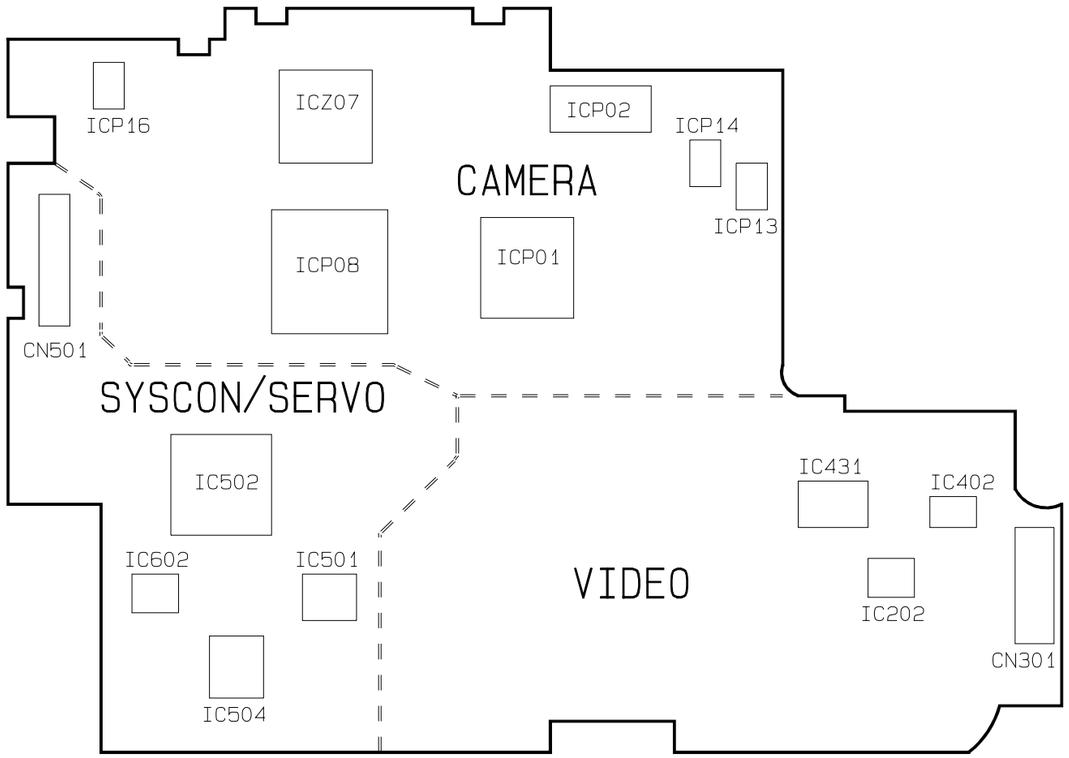
Note :
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list (may be slightly different or amended since this drawing was prepared).

Important safety notices :
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components. Use only the same type.

◆ Block Identification of Main PCB

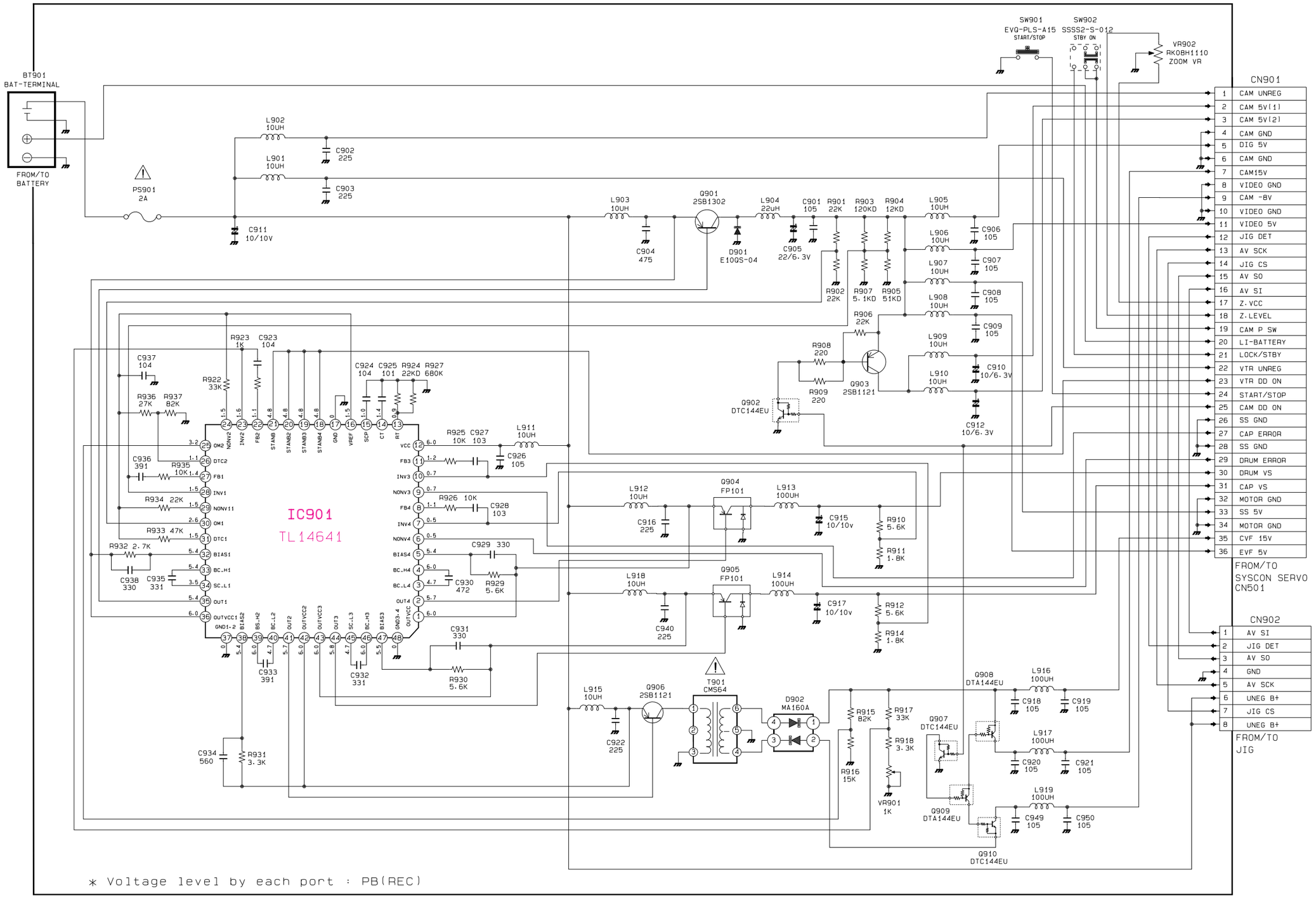


(Component Side)



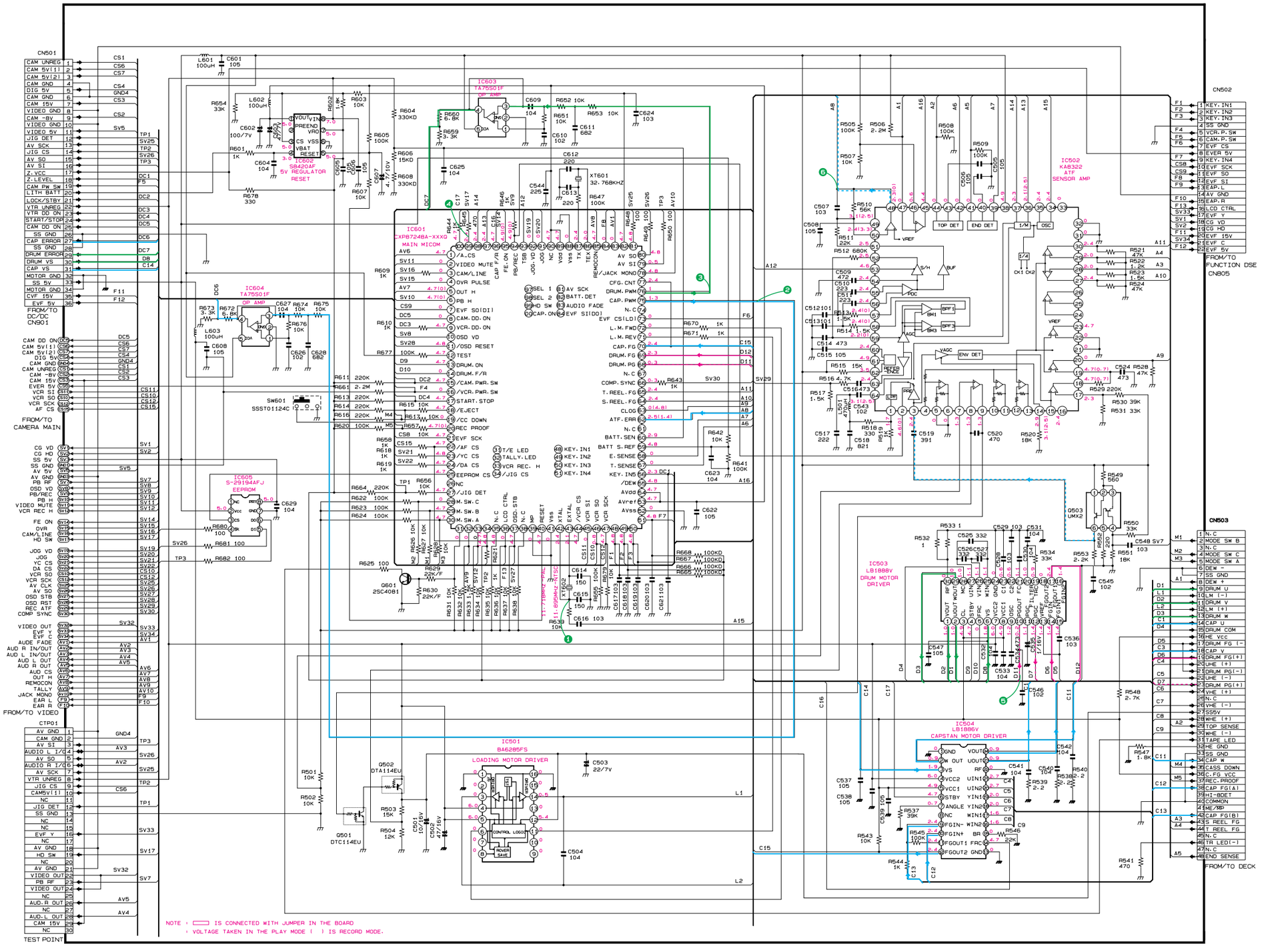
(Conductor Side)

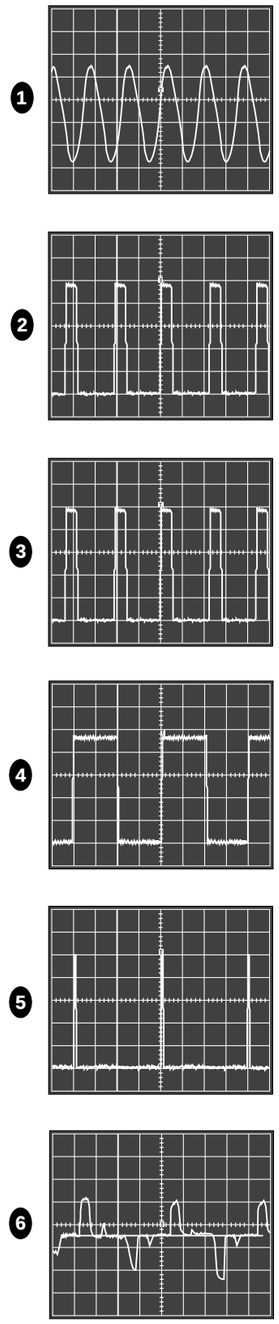
11-1 DC/DC Converter



11-2 System Control/Servo

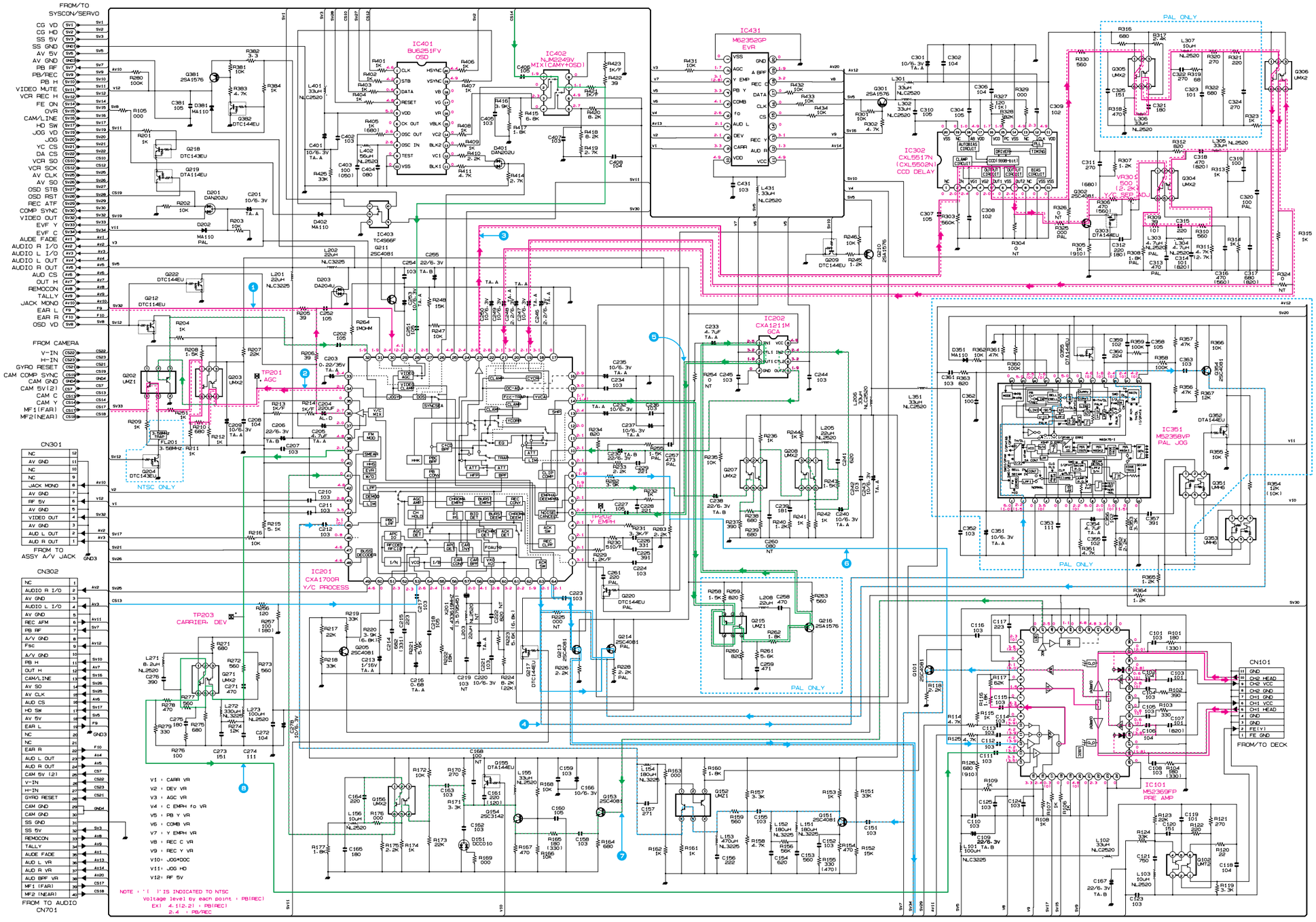
DRUM SPEED SERVO
DRUM PHASE SERVO
CAPSTAN SERVO (SPEED AND PHASE)
CAPSTAN SPEED SERVO
DRUM SERVO (SPEED AND PHASE)

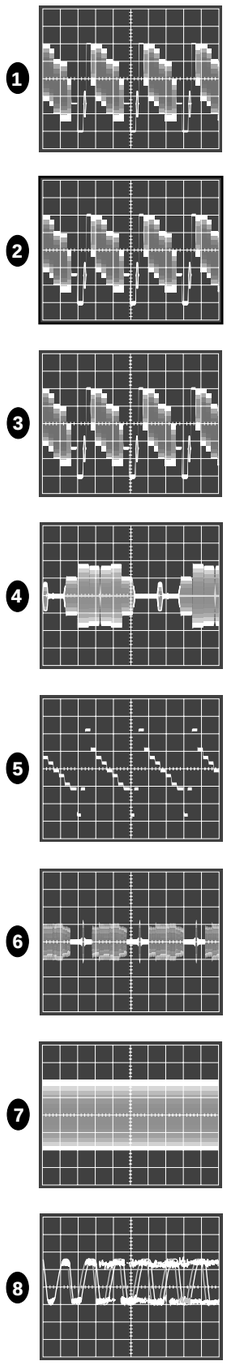




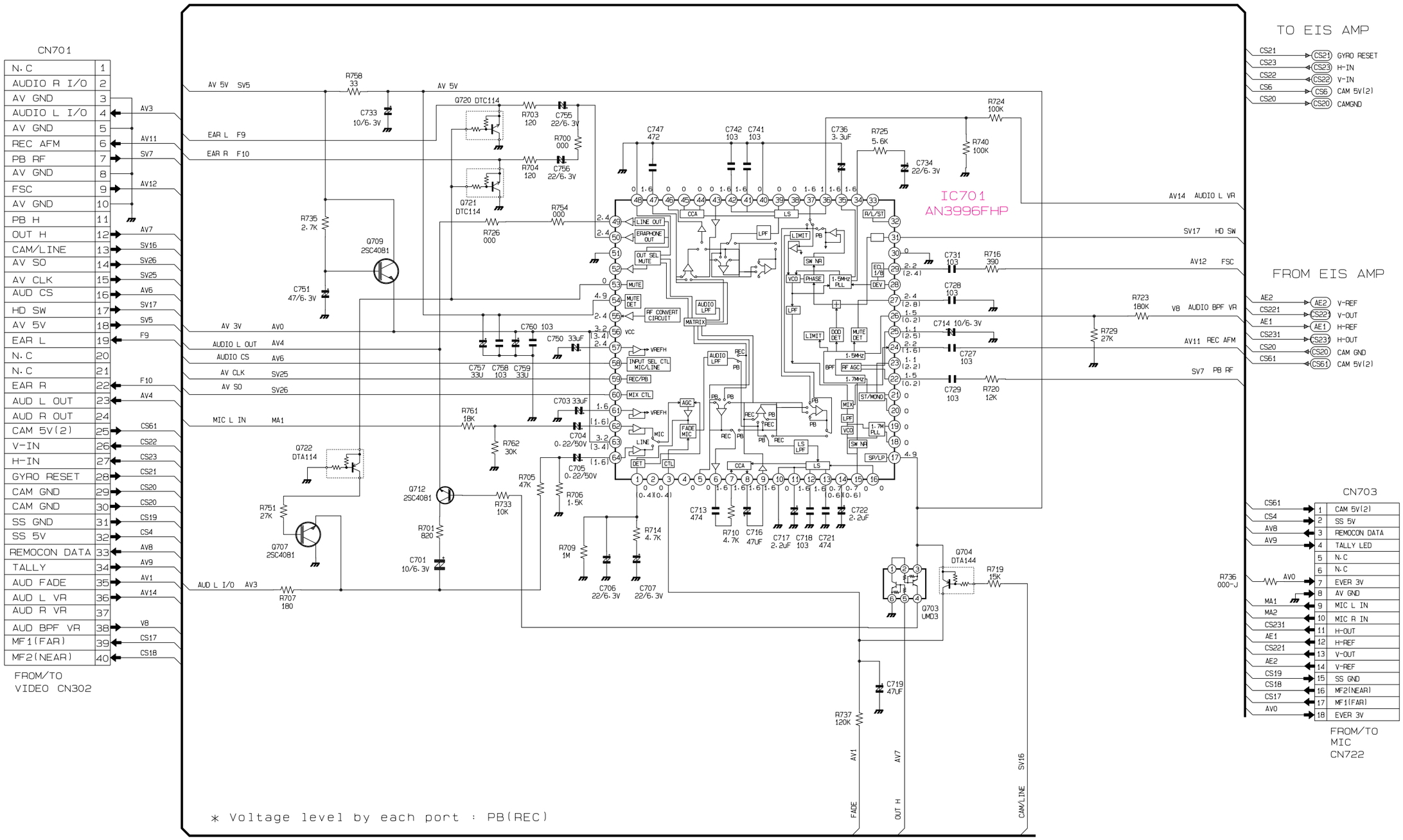
11-3 Video

VIDEO (Y+C) REC PROCESS
VIDEO (Y+C0 PB PROCESS
REC C PROCESS
PB C PROCESS
REC Y PROCESS
PB Y PROCESS

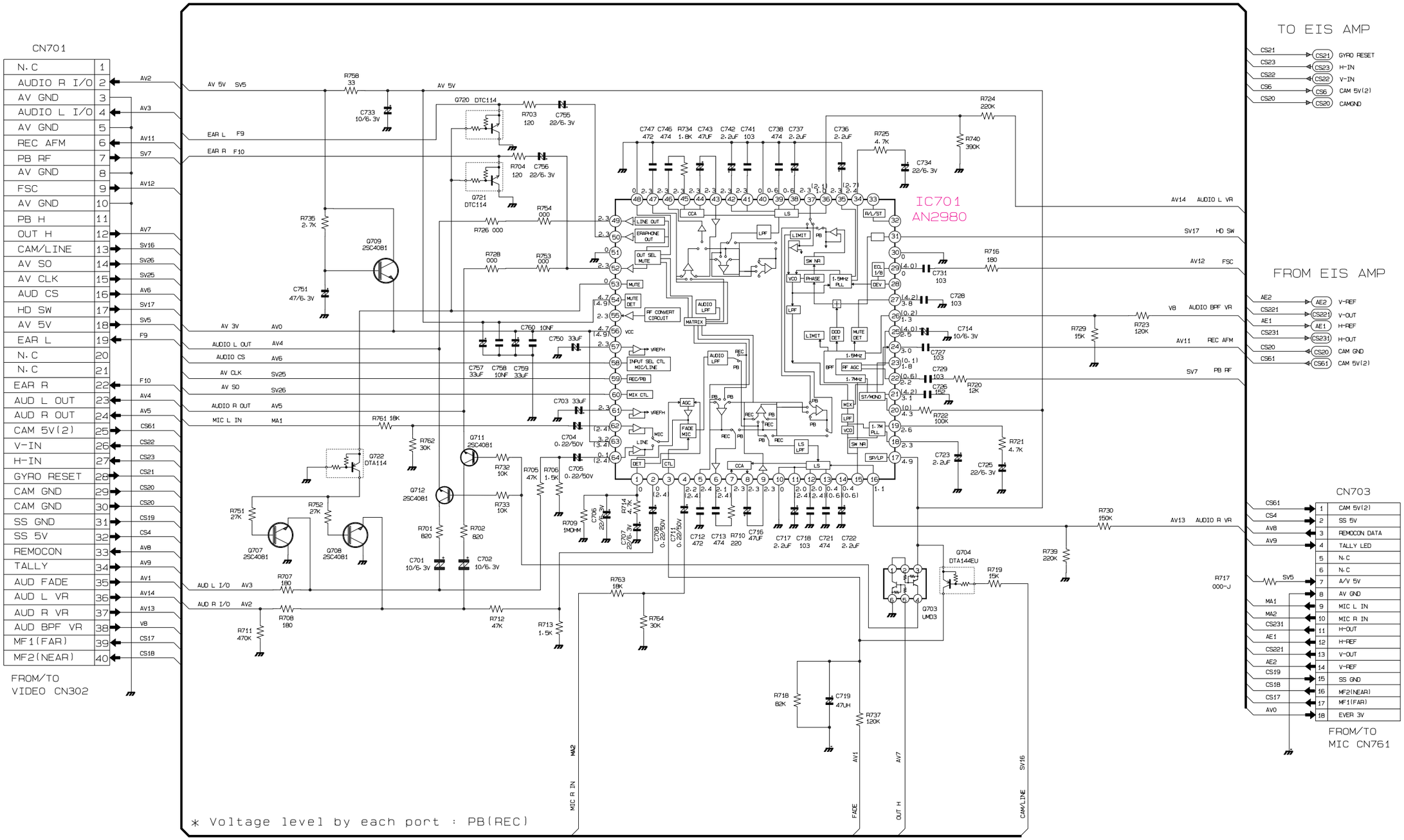




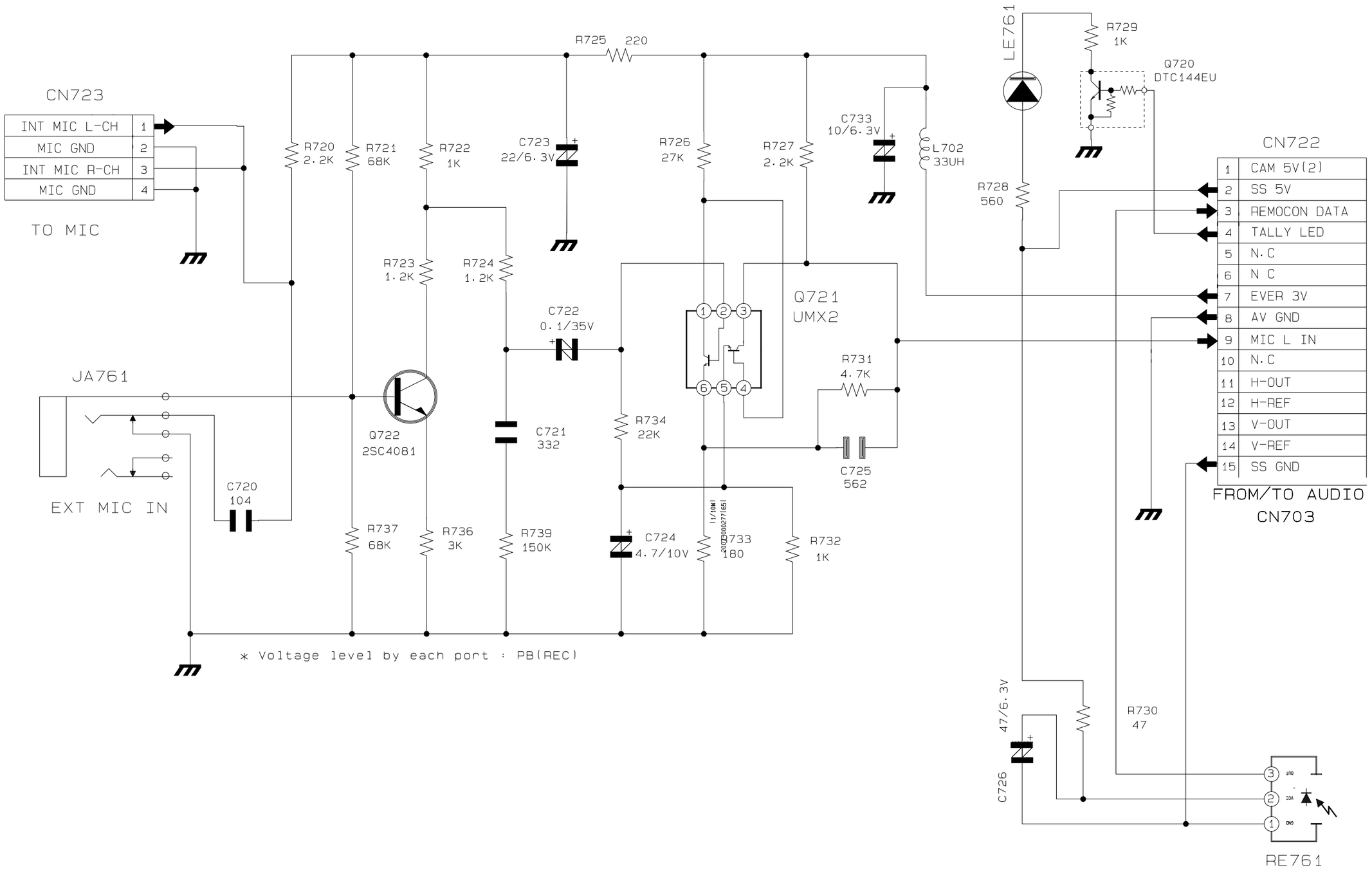
11-4 Audio (Mono)



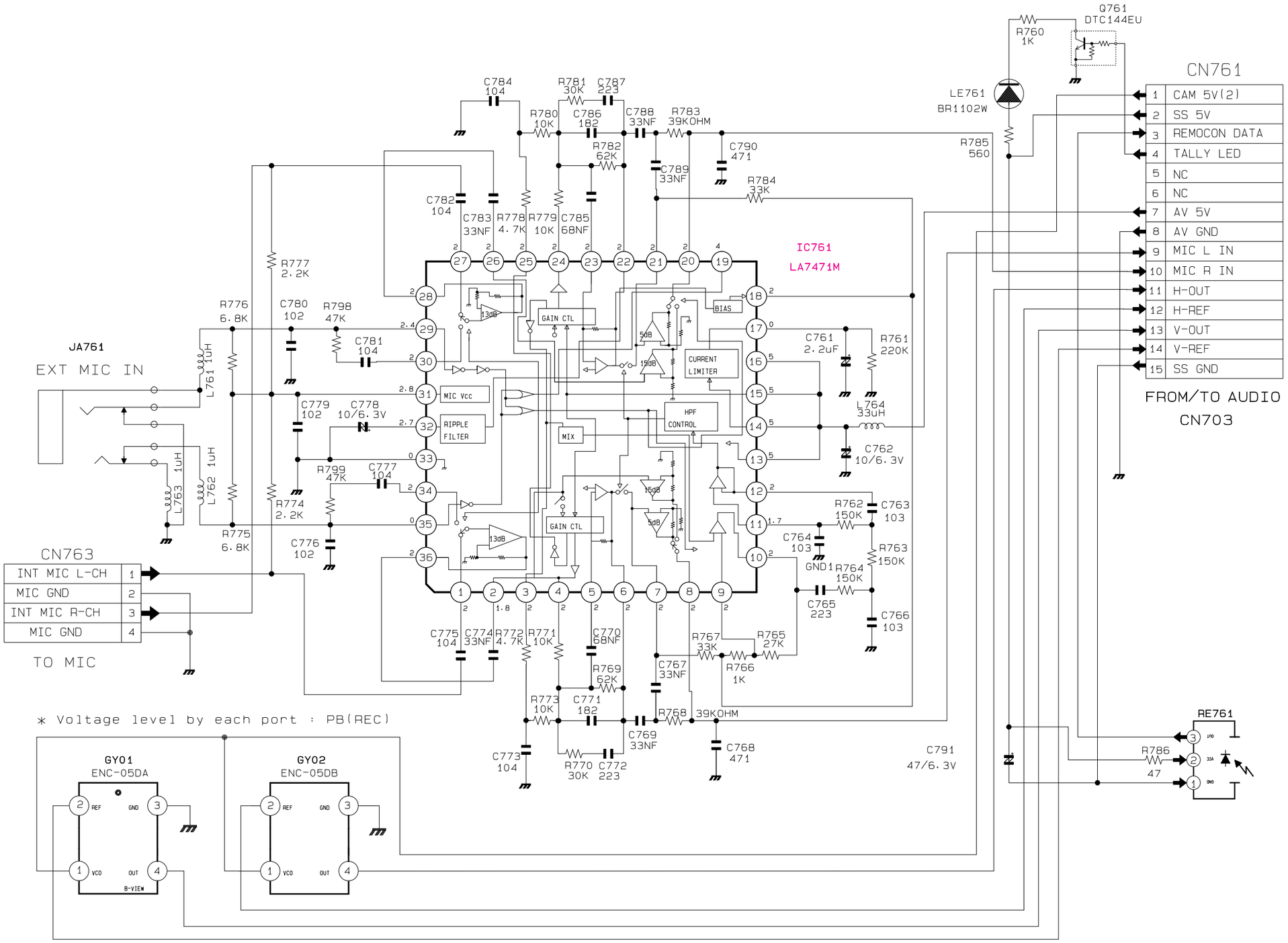
11-5 Audio (Stereo)



11-6 MIC (Mono)

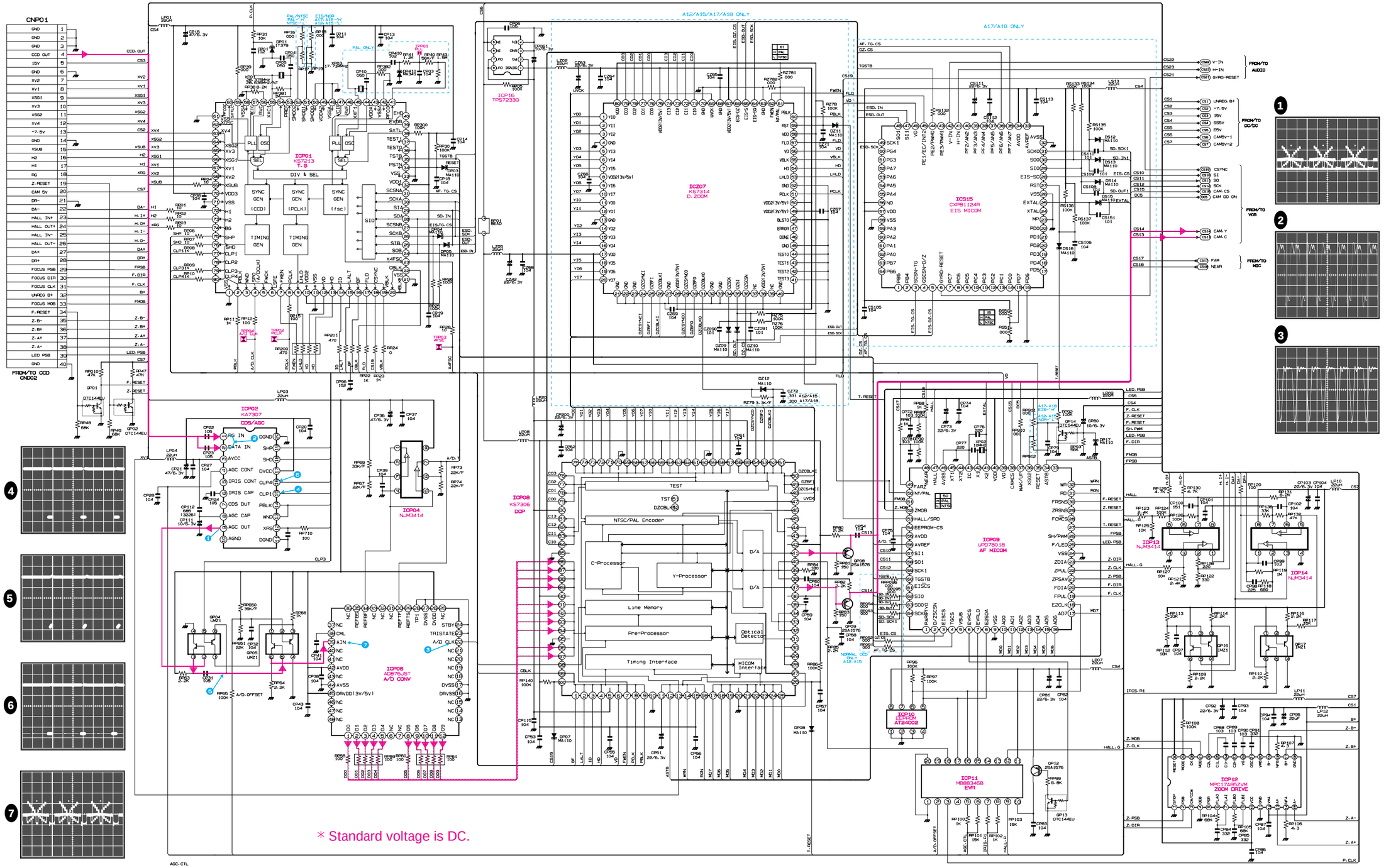

CN723
INT MIC L-CH 1
MIC GND 2
INT MIC R-CH 3
MIC GND 4
TO MIC
JA761
EXT MIC IN
R720 2.2K
R721 68K
R722 1K
R723 1.2K
R724 1.2K
R725 220
C723 22/6.3V
C722 0.1/35V
C721 332
C720 104
Q722 2SC4081
R734 22K
R737 68K
R736 3K
R739 150K
C724 4.7/10V
R733 180
R732 1K
R726 27K
R727 2.2K
C733 10/6.3V
L702 33UH
Q721 UMX2
R731 4.7K
C725 562
LE761
R729 1K
Q720 DTC144EU
R728 560
CN722
1 CAM 5V(2)
2 SS 5V
3 REMOCON DATA
4 TALLY LED
5 N.C
6 N C
7 EVER 3V
8 AV GND
9 MIC L IN
10 N.C
11 H-OUT
12 H-REF
13 V-OUT
14 V-REF
15 SS GND
FROM/TO AUDIO CN703
C726 47/6.3V
R730 47
RE761
* Voltage level by each port : PB(REC)

11-7 MIC (Stereo)



11-8 Camera Main

ANALOG SIGNAL
DIGITAL SIGNAL



PIN NO	VOLTAGE(DC)
ICP01	KS7213
1	0.0
2	3.9
3	0.6
4	2.8
5	2.6
6	5.0
7	0.0
8	2.2
9	0.0
10	4.8
11	0.0
12	4.8
13	4.5
14	2.6
15	2.5
16	4.8
17	2.4
18	4.5
19	4.6
20	4.0
21	0.0
22	3.8
23	2.9
24	0.5
25	1.3
26	3.4
27	4.9
28	0.5
29	0.0
30	5.0
31	4.0
32	5.0
33	0.0
34	4.4
35	0.0
36	0.0
37	0.0
38	4.4
39	0.0
40	0.0
41	5.0
42	0.0
43	5.0
44	2.6
45	1.0
46	0.2
47	0.4
48	0.0
49	5.0
50	0.0
51	5.0
52	0.0
53	5.0
54	2.6
55	2.5
56	0.0
57	1.3
58	0.0
59	5.0
60	2.7
61	0.0
62	2.6
63	5.0
64	5.0
65	4.7
66	5.0
67	0.0
68	0.0
69	4.9
70	5.0
71	0.0
72	2.5
73	2.1
74	0.9
75	3.7
76	3.7
77	1.3

PIN NO	VOLTAGE(DC)
78	0.0
79	0.1
80	0.0
ICP02	KA7307
1	2.3
2	2.4
3	4.9
4	3.6
5	1.4
6	2.2
7	1.4
8	2.1
9	1.5
10	0.0
11	0.0
12	1.4
13	4.0
14	1.0
15	0.1
16	0.1
17	5.0
18	3.7
19	3.7
20	0.0
ICP04	NJM3414
1	2.0
2	2.0
3	2.0
4	0.0
5	2.0
6	0.0
7	4.0
8	5.0
ICP06	AD876JST
1	2.6
2	2.4
3	2.9
4	2.2
5	3.1
6	0.0
7	0.0
8	2.1
9	2.1
10	2.4
11	1.7
12	1.4
13	0.0
14	0.0
15	0.0
16	0.0
17	0.0
18	0.0
19	0.0
20	0.0
21	0.0
22	2.5
23	0.0
24	0.0
25	0.0
26	4.9
27	0.0
28	0.0
29	4.0
30	3.9
31	1.3
32	1.2
33	1.2
34	2.0
35	2.1
36	1.0
37	0.0
38	2.6
39	2.6
40	0.0
41	0.0
42	5.0
43	0.0
44	0.0

PIN NO	VOLTAGE(DC)
45	4.9
46	0.0
47	0.0
48	0.0
ICP08	KS7306
1	4.7
2	2.5
3	2.5
4	4.5
5	3.3
6	4.8
7	0.0
8	2.3
9	4.2
10	0.2
11	5.1
12	1.2
13	0.2
14	5.1
15	5.1
16	5.1
17	1.1
18	3.9
19	4.1
20	0.0
21	3.9
22	2.7
23	2.7
24	2.7
25	2.1
26	2.7
27	0.2
28	2.4
29	4.8
30	1.8
31	0.0
32	4.4
33	1.6
34	4.6
35	0.0
36	5.1
37	0.7
38	3.2
39	1.3
40	1.1
41	0.9
42	4.9
43	0.2
44	0.2
45	0.6
46	0.0
47	1.7
48	4.4
49	4.8
50	3.8
51	0.0
52	3.7
53	4.7
54	4.4
55	3.3
56	0.2
57	1.0
58	2.8
59	2.6
60	0.0
61	1.3
62	1.4
63	1.4
64	1.4
65	4.9
66	1.4
67	0.5
68	2.9
69	3.1
70	0.0
71	1.2
72	2.4
73	1.7

PIN NO	VOLTAGE(DC)
74	1.9
75	1.9
76	1.8
77	1.9
78	1.9
79	2.1
80	3.3
81	1.5
82	1.5
83	1.5
84	2.0
85	0.0
86	0.0
87	0.1
88	1.0
89	2.0
90	4.9
91	1.9
92	2.9
93	2.0
94	2.6
95	0.0
96	2.5
97	2.1
98	2.6
99	3.9
100	1.2
ICP09	UPD78018
1	0.0
2	5.0
3	4.9
4	5.0
5	0.0
6	5.1
7	0.2
8	4.9
9	0.0
10	2.2
11	2.8
12	2.7
13	3.8
14	3.9
15	4.2
16	3.9
17	1.2
18	0.0
19	0.0
20	5.0
21	0.0
22	0.0
23	5.0
24	0.0
25	0.0
26	5.0
27	4.7
28	0.3
29	4.8
30	4.8
31	5.0
32	5.0
33	5.0
34	1.2
35	4.8
36	4.9
37	4.8
38	4.5
39	4.8
40	5.0
41	2.7
42	1.6
43	0.0
44	2.7
45	0.8
46	0.0
47	0.9
48	0.0
49	0.0
50	0.0

PIN NO	VOLTAGE(DC)
51	4.9
52	0.0
53	2.5
54	5.0
55	3.9
56	3.9
57	3.3
58	0.0
59	4.6
60	0.0
61	0.0
62	4.1
63	0.0
64	5.0
ICP10	AT24C02
1	0.0
2	0.0
3	0.0
4	0.0
5	5.0
6	0.0
7	5.0
8	5.0
ICP11	MB88346B
1	0.0
2	0.9
3	1.6
4	5.0
5	3.9
6	0.1
7	0.0
8	0.0
9	0.0
10	5.0
11	5.0
12	2.6
13	5.0
14	0.0
15	0.2
16	0.2
17	5.0
18	0.3
19	5.0
20	0.0
ICP12	MPC17A85ZVM
1	0.2
2	5.1
3	5.1
4	0.0
5	3.0
6	0.0
7	0.0
8	0.5
9	0.5
10	5.0
11	0.0
12	8.4
13	0.0
14	0.0
15	3.0
16	0.0
17	8.4
18	0.0
19	4.4
20	8.4
21	1.5
22	14.3
23	11.7
24	7.1
25	2.5
26	2.5
27	0.0
28	0.0
29	5.0
30	5.0
ICP13	NJM3414
1	2.3
2	0.5

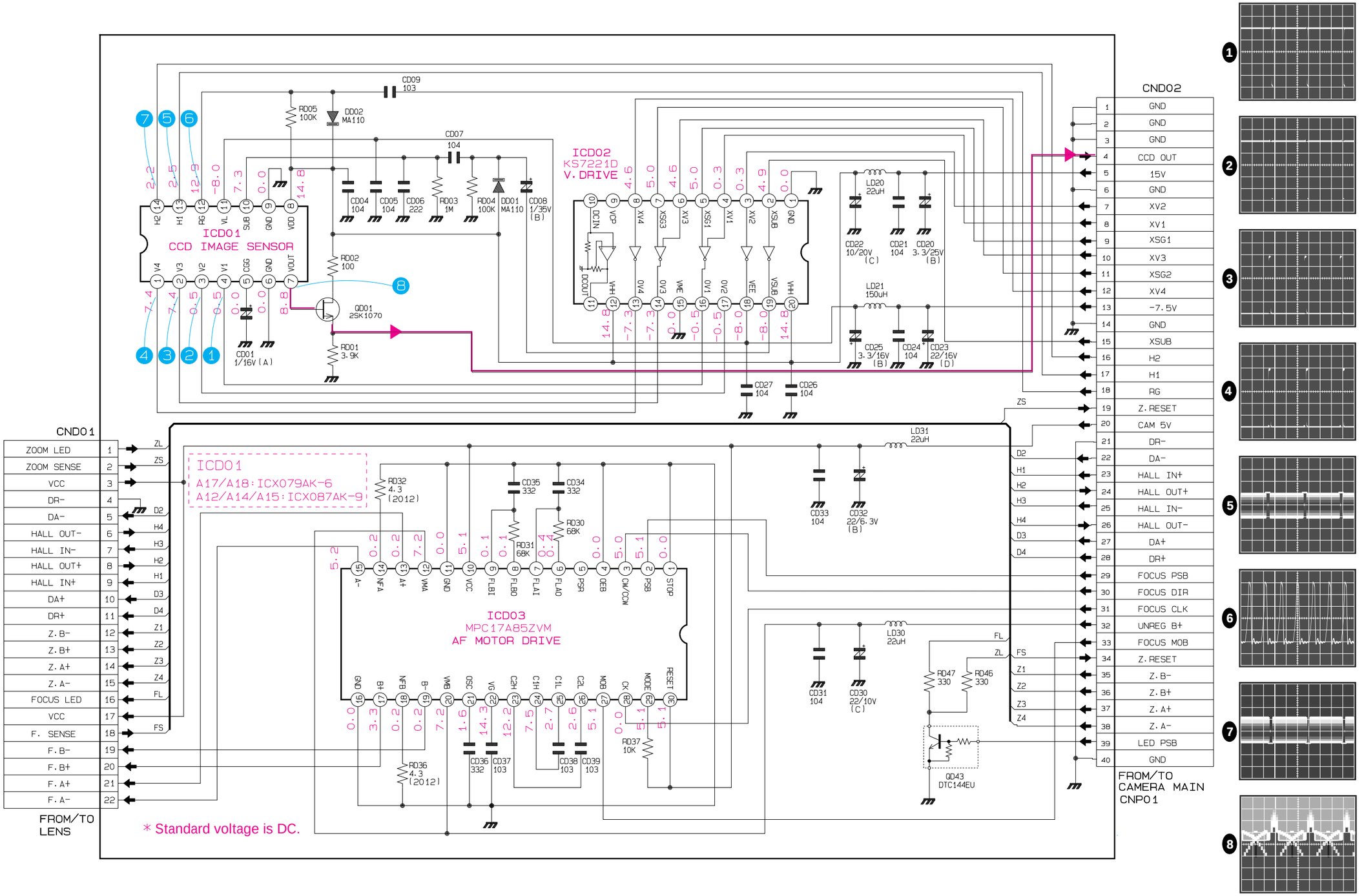
PIN NO	VOLTAGE(DC)
3	0.5
4	0.0
5	1.4
6	1.4
7	0.9
8	4.9
ICP14	NJM3414
1	4.2
2	1.8
3	1.8
4	0.0
5	0.7
6	0.9
7	0.5
8	4.9
ICP16	TP7233Q
1	3.4
2	4.4
3	0.0
4	0.0
5	4.9
6	4.9
7	3.3
8	3.3
ICZ07	KS7314
1	1.7
2	1.7
3	2.0
4	2.0
5	2.4
6	1.3
7	1.6
8	0.0
9	1.7
10	0.7
11	1.4
12	1.4
13	0.0
14	1.4
15	1.5
16	1.6
17	4.9
18	2.0
19	0.0
20	0.3
21	0.0
22	0.0
23	0.0
24	4.4
25	4.7
26	3.7
27	0.0
28	0.0
29	4.9
30	4.7
31	3.7
32	0.0
33	0.0
34	3.7
35	1.4
36	4.8
37	0.0
38	3.3
39	1.1
40	0.0
41	0.0
42	0.0
43	0.0
44	0.0
45	0.0
46	0.0
47	0.0
48	0.0
49	3.3
50	3.3
51	3.3
52	0.0
53	0.0

PIN NO	VOLTAGE(DC)
54	4.5
55	4.6
56	4.8
57	0.0
58	4.9
59	3.1
60	4.0
61	0.0
62	0.0
63	0.0
64	3.1
65	1.2
66	4.9
67	3.3
68	0.0
69	1.7
70	0.0
71	1.6
72	1.6
73	1.7
74	1.8
75	3.3
76	1.7
77	1.9
78	1.8
79	2.3
80	4.9
ICS15	CXP811P24A
1	3.3
2	1.7
3	1.7
4	3.3
5	1.6
6	0.0
7	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13	0.0
14	0.0
15	0.0
16	0.0
17	5.0
18	5.0
19	5.0
20	5.0
21	5.0
22	5.0
23	0.0
24	2.8
25	5.0
26	5.0
27	5.0
28	0.4
29	5.0
30	5.0
31	5.0
32	0.0
33	0.0
34	0.0
35	5.0
36	5.0
37	0.0
38	0.0
39	0.3
40	0.3
41	3.9
42	2.6
43	5.0
44	5.0
45	2.5
46	4.8
47	5.0
48	5.0
49	5.0
50	0.0

PIN	VOLTAGE(DC)
51	5.0
52	2.5
53	2.0
54	1.9
55	1.7
56	5.0
57	5.0
58	0.0
59	1.7
60	1.7
61	1.7
62	1.7
63	1.7
64	1.7

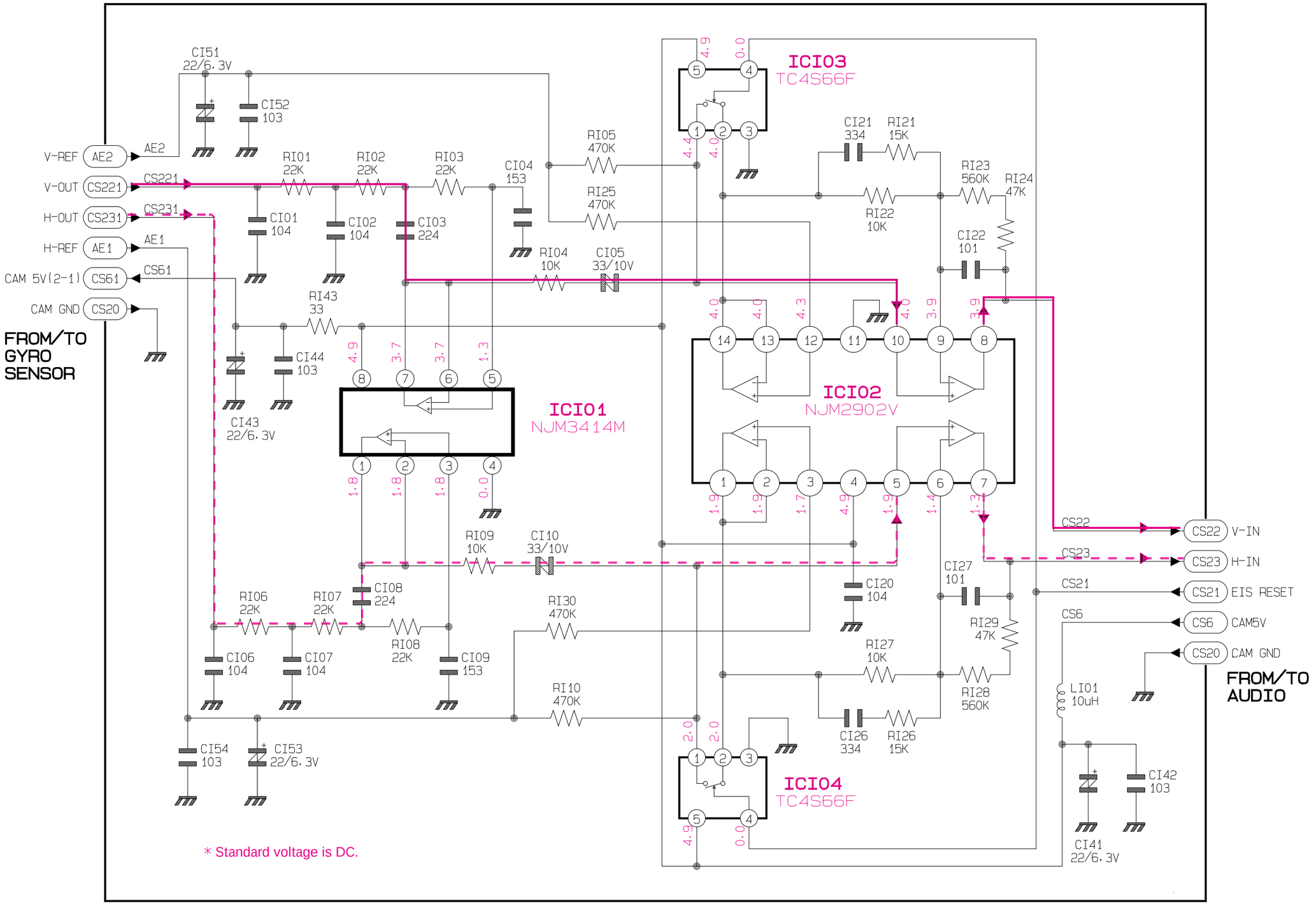
11-9 CCD

CCD OUT

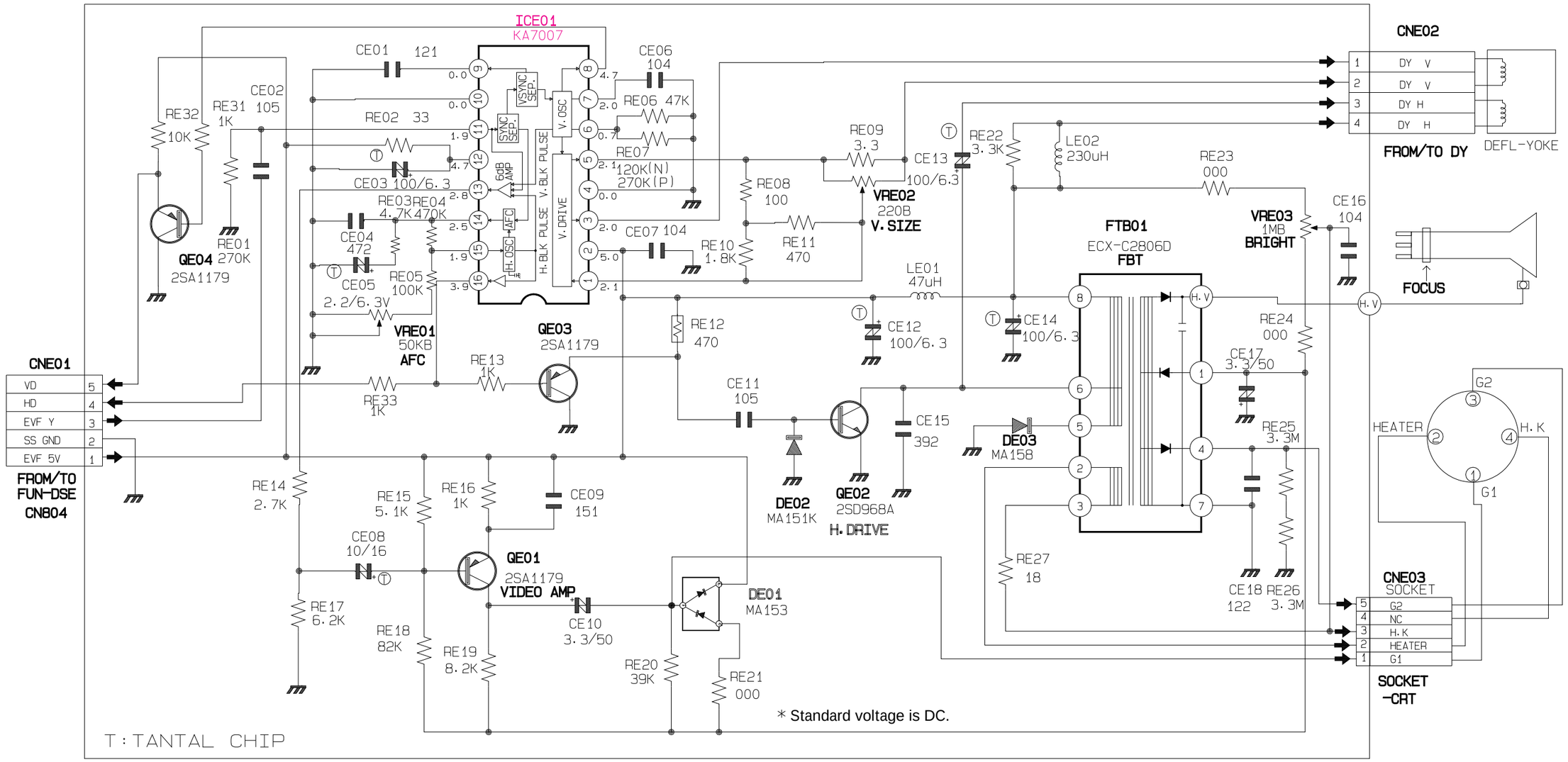


11-10 EIS (VP-A17/VP-A18)

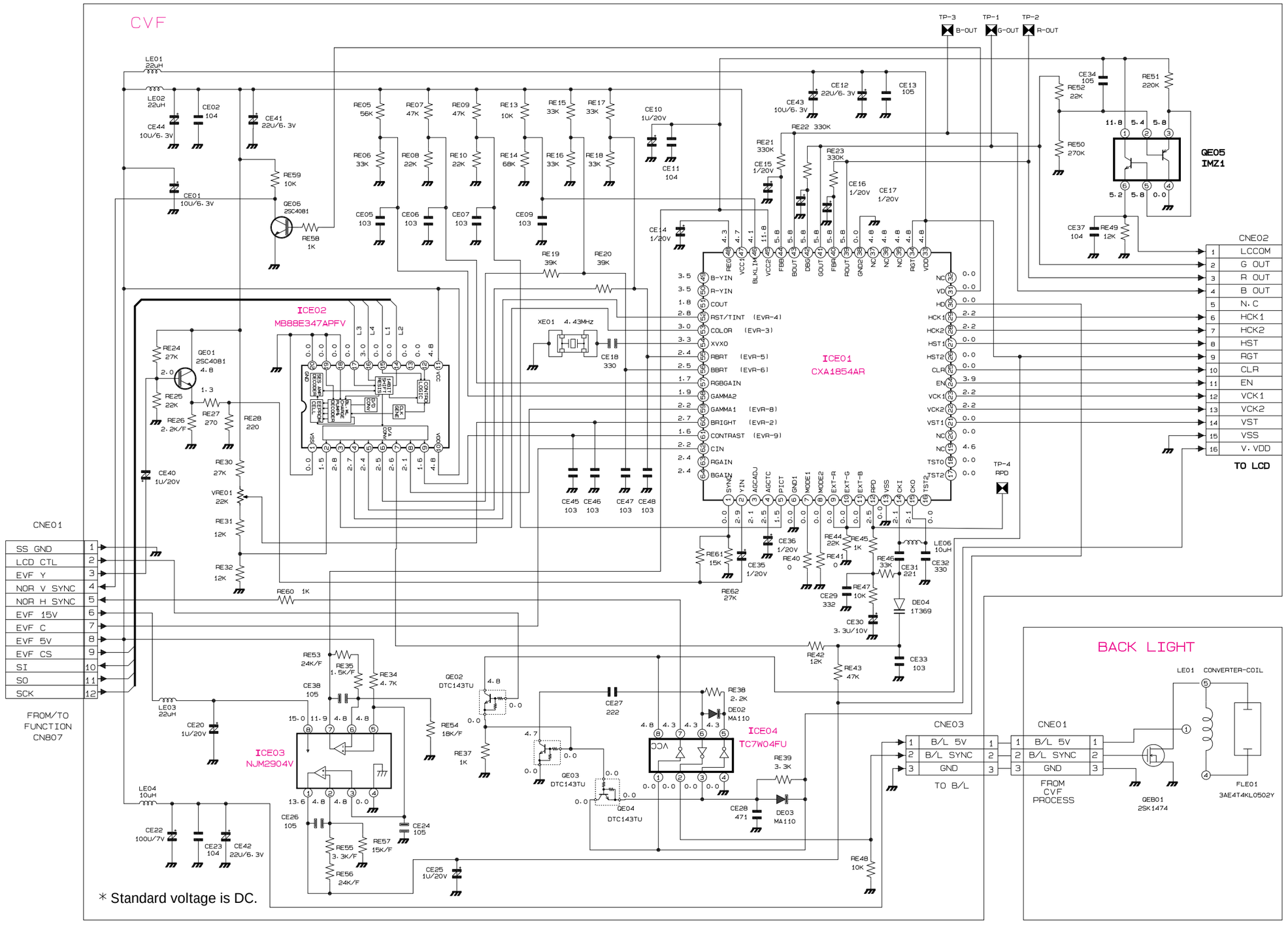
V-OUT
H-OUT



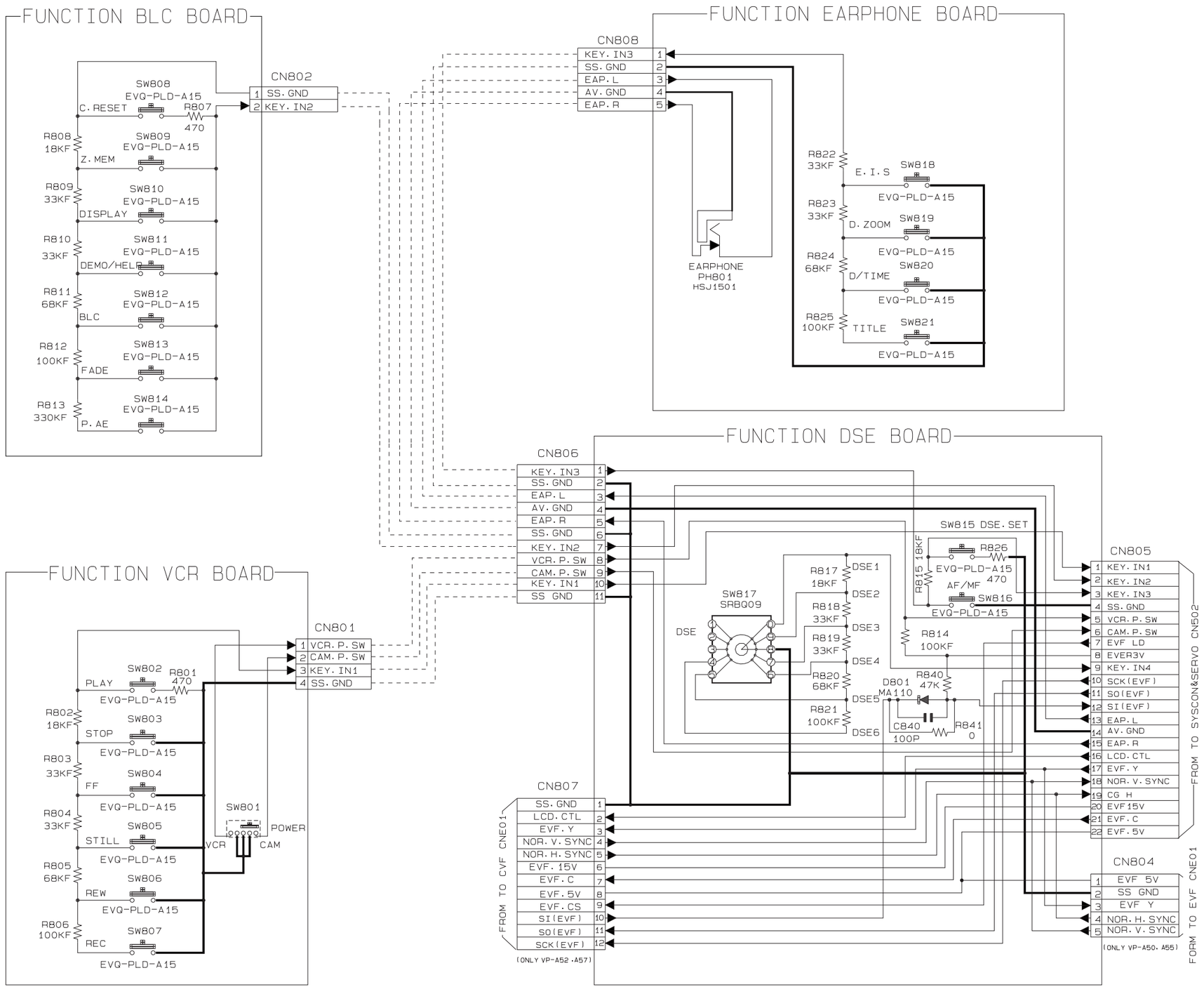
11-11 EVF(VP-A12/VP-A17)



11-12 CVF(VP-A15/VP-A18)



11-13 Function



11-14 Adaptor